



## The School of Fine Tuning



## Pregnancy Massage Training Book

Accredited with The Complementary Medical Association and  
International Practitioners of Holistic Medicine

## **Syllabus**

1. Course Content/Overview
2. Introduction, Health & Safety Law
3. Professionalism & code of ethics
4. Hygiene
5. Contra-indications/Restrictions & Contra Actions
6. Anatomy & Physiology
7. Consultation & preparation
8. What is pregnancy massage/Is it safe
9. Massage Techniques
10. Massage Mediums
11. Benefits of Pregnancy Massage
12. Aftercare
13. Massage Routine
14. Pregnancy & Hormones
15. Recommended Reading
16. Practical Assessment

the school of fine tuning

## **Pregnancy Massage**

## Overview

Duration: 1 day – 5.5 hrs

Fee: £170.00

Prerequisites: Level 3 Anatomy & Physiology + Body Massage

Qualification: Qualified to perform Pregnancy Massage, accredited with the Complementary Medical Association and IPHM awarding 7 CPDs. ***This qualification will enable you to obtain public liability insurance upon successful completion of the course.*** The course runs over 1 day and includes theory and practical training. Your theory will be at the start of the day, and the practical assessment in the afternoon where you will learn how to carry out a full body pregnancy massage treatment.

### Introduction

Please note that the fire exit will vary with each training centre, please ensure you are aware. We will have tea and coffee breaks throughout the day, there may be biscuits/snacks provided, however, if you have allergies, please bring your own.

the school of fine tuning

## PREGNANCY MASSAGE

A woman's body undergoes dramatic changes during the 40 weeks of pregnancy. These physical changes are the result of hormones released during pregnancy, as well as the growth of the foetus and the resulting metabolic changes.

As many expectant mothers soon realise, carrying a baby shifts a woman's centre of gravity and places stress on the back, neck and shoulders. Pregnancy also relaxes ligaments and causes the pelvic joints to become less stable, thereby changing posture and pulling the pelvis forward.

Pregnancy, therefore, brings with it a variety of side effects, some less pleasant than others. Most mothers can expect to experience some muscular tension and stiffness during their pregnancy as their uterus expands to accommodate their growing baby.

Fortunately, massage therapy during pregnancy can often relieve many of the common side effects of backaches, headaches, oedema and other pregnancy related problems. Prenatal massage is increasingly gaining popularity as women recognise the benefits massage has to offer both physically and psychologically.

Consider just a few of the changes (Kisner and Colby 1990):-

- The uterus increases 5-6 times in size and about 20 times in weight by the end of the pregnancy.
- Maternal blood volume gradually increases 35-50 percent.
- Cardiac output increases 30-60 percent.
- There is a 15-20 percent increase in oxygen consumption and the respiratory rate increases to meet this need.

Massage is used to help with the psychological and emotional impact of pregnancy and, because you often have ongoing contact with the mother-to-be, you may develop a treatment plan and this can play a pivotal role in preventing potential problems occurring.

This manual is to help you be aware of the normal changes that take place during pregnancy, so that you can refer your client to her medical practitioner when unusual signs and symptoms occur. **However, as therapists, we cannot diagnose and any information given within this manual should NOT be construed as medical advice. If in doubt, refer your client to their medical practitioner or midwife.**

## **BENEFITS OF PREGNANCY MASSAGE**

- Helps relieve oedema and swelling by stimulating circulation throughout the body.
- Relief of muscular tension, especially in the lower back, upper back, shoulders and neck.
- Reduces stress on weight bearing joints.
- Enhances body awareness for better posture.
- Assists with body mechanics and movement during structural changes.
- Eases anxiety and stress during time of transition.
- Gives emotional support and nurturance.

It may be that the partner would like to be involved in the labour and give massage to support the mother to be – studies show (Klaus, Kennell and Klaus) that labour support with physical contact can lead to shorter labours and/or decrease the need for caesarean sections.

Studies at the University of Maine show that, just 20 minutes of massage twice a week, for five weeks, reduces stress hormones in the body, improves mood and sleep patterns and reduces anxiety and back pain.

the school of fine tuning

## **Health & Safety**

Before you begin work as a beauty, holistic therapist or nail technician you will need to be aware of the legislation that you must comply with for the health and safety of yourself and your clients. You will need to have an understanding of what is expected of you as a professional. This includes how to conduct yourself in front of clients and interact with fellow professionals.

### **Health and Safety at work Act 1974**

The Health and Safety at Work Act requires all employers to provide systems of work that are as far as reasonably practical, safe and without risks to any ones health. As an employee you have the responsibility to take care of yourselves and others that may be affected by their work. Employees must also co-operate with their employer in this legal obligation.

As an employee you see something which could be potentially harming, such as a hole in which a person could trip over, it is your immediate responsibility to report this to the management and to take some remedial action such as placing a sign or covering the hole, until a repair can be made. The act also requires employers to take regular risk assessments to identify potential problems, preventing accidents or injury from occurring. Health and safety is enforced by Environmental health officers who visit the workplace. Anyone who employs more than 5 people must have written health and safety policies. This should identify how health and safety is managed, including individual roles staff may have, such as first aid or fire safety.

### **Risk Assessments**

Risk Assessments should be carried out to identify what may cause harm in your workplace, who is at risk and how accidents could happen, as well as actions you need to take to prevent them. You should record all of this information and all staff should then act upon it. You can find templates for risk assessments on the website for Health & Safety Executive at [www.hse.gov.uk](http://www.hse.gov.uk)

### **Management of Health and Safety at Work regulations (1999)**

It is the responsibility of the employer to make formal arrangements for maintaining and improving safe working conditions and practices. This includes any training and risk assessments.

### **Health and Safety (Display Screen Equipment) Regulations (1992)**

This covers the use of display screen equipment and computer screens. This specifies the acceptable levels of radiation emissions from the screen, as well as identifying the correct posture and number of rest periods.

### **Provision and use of Work Equipment Regulations (1998)**

This states any duties for any users of equipment. It identifies the requirements in selecting and maintaining suitable equipment, as well as the training and safe use of it.

### **The Regulatory Reform (Fire Safety) Order (2005)**

All premises must have adequate means of dealing with a fire and all members of staff should know where these are. This can include fire extinguishers and blankets, however you should only operate a fire extinguisher if you have been properly trained to do so. All equipment should be checked and maintained regularly. Fire drill notices should be clearly displayed and should inform people of what to do in case of a fire. All staff should be trained in location of alarms, exits and meeting points.

### **Manual handling operations Regulations 1992**

The HSE (Health & Safety Executives) have drawn attention to musculoskeletal disorders caused by lifting and handling with an unsuitable posture, causing pain and injury. The regulations require that training in lifting and handling are performed to prevent such injury's occurring.

### **Cash Handling**

Under the health and safety at work act, failure to provide a safe system of cash handling could lead to prosecution of the employer. For example employers should consider this before sending a member of staff to the bank with cash as it is putting them in a potentially unsafe situation.

### **PPE – Personal Protective Equipment at Work Regulations 1992**

This act covers equipment and protective clothing to ensure the safety for all in the workplace. This act also states that personnel must have training in the use of such protective measures.

### **RIDDOR – Reporting of Injuries, Diseases or Dangerous Occurrences Regulations 1995**

This regulation states that if anyone dies, is seriously injured in an accident at work, or is off work for longer than 3 days as a result of an accident at work the employer must report it to the local authority environmental health department. Employers must keep a record in an accident book

of any accident or disease. For legal reasons, even minor accidents should be recorded so that there can be an agreed record of what occurred and what action was taken.

### **Performing Rights PPL & PRS**

If recorded music is played on the premises, and heard by members of the public, then it is necessary to have a license from the Phonographic Performance Ltd (PPL) which like the PRS (Performing Right Society) collects license payments as royalty's distribution to certain copyright performers and record companies. This includes music on television channels, radios, CD's, MP3 Players.

### **COSHH – Control of Substances Hazardous to Health Regulations 1994**

This law requires employers to control exposure to hazardous substances in the workplace. Most products used in the salon are reasonably safe, however could become hazardous under certain conditions, or if are used in-correctly. Every therapist should be trained on how to use and store these products correctly. It is the Employers responsibility to assess the risk of hazardous substances and decide on any action to reduce the risks.

### **Gas Safety (installation & Use) Regulations 1994**

This regulation relates to the use of and maintenance of gas supplies. The rights of entry regulations 1996 gives GAS and HSE inspectors the rights to enter premises and order the disconnection of dangerous and unsafe appliances. All work undertaken on Gas appliances should be done by registered engineers.

### **Electricity at Work Regulations 1989**

This regulation ensures the safety in the use of electricity. Part of this act is the operation and maintenance of electrical equipment in the salon. Equipment should be tested regularly (every 6 months) to ensure that all flexes and fuses are functioning properly. This does not necessarily need to be an electrician. Most salons have their equipment tested on an annual basis and are certified this is known as portable appliance testing (PAT).

### **Local Government (Miscellaneous Provisions) Act 1982**

Part 8 of the act provides local authorities with powers for the registration of persons who are performing skin piercing (ear piercing, acupuncture etc). It applies to everyone whether working



from a salon or mobile. Each local authority operates its own methods of inspection and licensing at its own cost. Fees vary depending on your location.

### **Trades Description Act 1968 (Amended 1987)**

This Act prohibits the use of false trade descriptions. Whether your own claim, or repeating of a manufacturer's description, a false claim can be equally liable.

### **Sale of Goods Act 1979 & Sale and Supply of Goods Act 1994**

These acts cover consumer rights including goods being satisfactory quality and the conditions in which the goods may be returned after purchase, and whether the goods are fit for their purpose.

### **Consumer Protection Act (1987)**

This act aims to protect the consumer from unsafe or defective services or products. All staff should be trained in the treatments they carry out and the equipment used in the salon.

### **Cosmetic Products Safety Regulations 1996**

These regulations were made under the Consumer Protection Act 1987 and implement EEC regulations regarding labeling, composition, marketing and description of cosmetic products.

### **Employers Liability (Compulsory Insurance) Act 1969**

This act ensures that all employers take out and maintain approved insurance policies with authorised insurance bodies for bodily injury or disease sustained by their employees in the course of their employment. Insurers must issue a certificate of insurance to employers who are required to display the certificate (or a copy) at each place of the business.

### **Treatment Liability Insurance**

Attention is drawn to the risks which are insurable under a treatment liability policy. To provide treatments or to advise without such insurance cover may result in the therapist whether employed or not suffering heavy financial penalties. Employees who do not have their own insurance must ensure that they are covered by their employer's policy.

### **Data Protection Act 1984**

If a computer is used to record client data information the establishment must be registered under this act. The act operates to ensure the information is only used for the purposes that it was given. No information may be given to an outsider without the client's permission. The

client whose information is held has the right to request the information for viewing. It must be provided to them within 40 days of an application and of a fee not exceeding 10.00. Clients can seek compensation through court for any infringement of their rights. For more information visit: [www.ico.gov.uk](http://www.ico.gov.uk)

## GDPR

The GDPR (General DATA Protection Regulation) came into force on 25th May 2018. If your Salon/Business collects or stores any type of **personal data** from people in the EU – you will need to comply with GDPR regardless of the Brexit status at the time. If you don't comply – there can be financial penalties.

The information you collect could include names, email addresses, contact details, postal and digital IP addresses etc. The new regulations are designed to give control of personal information back to ordinary people, prioritising them over the interests of businesses.

Therefore, it's important for you to be aware of this new legislation and adhere to it accordingly. There are some positives – being compliant shows your audience that you are a trustworthy organisation that respects their privacy and personal information

What this means for you:

- **Conduct a personal data audit.** List what data you collect about your clients either through your website, consultations or through 3rd parties – basically list every single possible way you obtain client data whether that is through your website, in written form or through your mobile phone. Do you have a newsletter feature on your website? Do you operate an online store and collect customer data in order to process orders? Where is that data stored? Does it go directly to your email or stored in a database in your website? Think about whether all the data you collect is necessary. If you feel that some of the information you currently collect and store isn't strictly necessary, you can take steps to stop collecting it and purge it from your databases.
- **You will need to add a privacy policy to your site** – many GDPR privacy policy templates are available by searching Google. It is suggested that you create a page in your website called PRIVACY POLICY which will appear in your main website menu. Your website must be SSL compliant – if it starts with https:// and has a padlock next to the website address in your browser then you're fine... if not, contact your website provider to upgrade.

- **Contacting all your clients making them aware of GDPR**, your new privacy policy and requesting consent to be able to continue to communicate with them. You can either do this by emailing everyone and asking them to reply back confirming it's ok for you to process and store their data or you can ask them to click on a link requesting them to opt-in using a newsletter facility such as mailchimp.com.
- **Understand what must be done in the event of a breach.** GDPR requires the data controller to have defined processes in place in the event of a data breach. The data controller has a legal obligation to report a data breach within 72 hours. For more information about this, take a look at an article on the reporting of data breaches.
- **Children.** GDPR, for the first time, brings in special protections for children's personal data – particularly in regards to commercial internet services such as social media. If your organisation offers services to children and relies on consent to collect information about them, you will need to gain the parent or guardian's consent in order to process the child's data lawfully. GDPR sets the age at which a child can give their own consent to this processing at 16. This means that your privacy information page must be written plainly enough for a child to understand.
- **Record Cards.** Remember to add your disclaimer to the bottom of your record cards so that clients can opt in or out of having personal data stored. Here is an example for you to use:

*I agree to **YOUR BUSINESS NAME HERE** obtaining, holding and using my personal information for the purposes of this consultation and suitability checking for any future treatments I may have. I understand that I have the right to withdraw my consent and have my details destroyed.*

**Yes/No** \*Please circle.

**Initial:**

**Date:**

### Further Reading

**ICO guide to GDPR. Be sure to download the GDPR 12 Step Guide**

### Minors

In England, Wales and Northern Ireland a minor is anyone under the age of 18. Sometimes you will have requests for appointments from clients who are younger. If the client is under 18 you

should always obtain written permission from their parent or guardian for the treatment to go ahead. They should also accompany the minor to the salon for the appointment. It is also recommended that you check your insurance policy wording to see if there are any age restrictions detailed in it.

Salon owners should insist that appointments for under 16's are booked out of school hours. Tanning treatments should not be carried out on under 18's in line with guidance from the British Medical Association and the HSE. It is recommended that intimate waxing such as Brazilian or Hollywood should not be carried out on anyone under the age of 18.

### **First Aid at Work**

(The Health & Safety First Aid Regulations 1981)

Employers have a legal duty to make arrangements to ensure their employees receive immediate attention if they are injured or taken ill at work. It is essential that they receive immediate attention and that an ambulance is called in serious cases. A person within the workplace should be appointed to take charge of the first aid arrangements. These regulations do not require employers to provide first aid for anyone other than their own employees.

### **Equal Opportunities**

The equal Opportunities Commission states that a workplace must have a written equal opportunities policy which includes a statement on the commitment to equal opportunities by the employer. All employees should be aware of this policy. Equal opportunities means that you cannot discriminate against anyone upon the basis of their sex, race disability etc.

### **Disability Discrimination Act (1996)**

You should ensure that clients are not discriminated against on the grounds of a disability. You cannot use this as a reason to refuse to provide a treatment or service, you cannot provide a lesser service or fail to make reasonable adjustments. The premises must be able to facilitate access for disabled people.

### **The Equality Act (2010 EA)**

This act gives disabled people important rights of access to everyday services. Service providers have an obligation to make reasonable adjustments to premises or to the way they provide a service. Sometimes it just takes minor changes to make a service accessible.

### **Smoking**

All areas of work in the uk should now be smoke free by law. If you do have a smoking area, this should be clearly marked. You should display signs prohibiting smoking within your business.

### **Laundry**

All uniforms, towels and couch covers should be laundered with a detergent at a minimum temperature of 60 degrees centigrade and then tumble dried on a hot setting. If your towels are white they can be washed on the hottest setting your machine will allow. Never let towels stand while wet.

### **Hand Washing**

Remember to always wash your hands before and after every treatment. This should involve a thorough 20 to 30 second wash of the hands and wrists using hot water and liquid soap, followed by drying with paper towels or hand drier. Certain areas of the hands are more prone to harboring microorganisms. These are between fingers, the finger tips, thumb and back of the hand and wrist.

### **Waste**

Anything contaminated with human tissues (blood, bodily fluids, excretions, swabs) should be designated as a group A clinical waster under the Environmental Protection Act 1990 and the Controlled Waste Regulations 1992. I can recommend Direct365 for yellow/Hazardous waste collections.

the school of fine tuning

## **Professionalism & Code of Ethics**

Each professional organisation should produce its own code of ethics based on expected standards of behavior. These are referred to as a professional code of ethics. They are not mandatory, but help towards maintaining high standards in the industry. Any individual within the organisation should:

Always work within the law

Never treat, or claim to be able to treat a medical condition

Respect client confidentiality

Show respect for other professions (chiropractor etc)

Maintain high standards of Safety & Hygiene

Apply certain treatments only with written consent from a GP

Support and show loyalty to other professional beauty therapists

Never poach another therapist's client

Maintain a professional manner

Respect clients modesty

### **Personal Appearance & Professionalism**

Taking care of your personal appearance is important for presenting a professional image, and also maintains good standards of hygiene. Always ensure that your skin, hair and nails are clean at all times. Your uniform should also be clean and well presented. What you choose to wear should be functional and present a professional image of yourself. Comfortable smart shoes are recommended. Hair should always be clean, tidy and tied back when necessary. Jewelry should be kept to a minimum to avoid it being damaged or causing harm to a client during a treatment.

Nails should be kept neat and short, particularly when offering hands on treatments such as massage or facials. Always make sure your hands are washed before and after every treatment. Remember that you are an advertisement for your business.

Personal hygiene is very important when working closely with clients. Make sure that you shower and use deodorant on a daily basis. Make sure that your posture is correct when sitting or standing to prevent muscle fatigue. Uniforms should be laundered regularly.

## **Costs**

Always ensure that the services you offer are cost effective. Make sure that you consider all your overheads, the cost of your time, your local area and particular clientele when setting a price for your treatment. The price you charge for your treatment should cover all overheads and include reasonable profit margins, whilst also being appealing to the public.

## **Personal Safety**

Wherever you are working, it is important to keep safe at all times. If you are travelling to appointments you should ensure that your car is in good condition, ensure that it is regularly serviced. If you have an appointment with a new client, make sure you know where you are going. Plan your journey beforehand, and if possible, try to complete a practice run at an earlier date. Being able to find an address you are looking for means that you are less likely to be late. Try to park close to your clients home, this limits the distance you need to walk alone. Try to remember not to leave valuable and equipment on show in your car. Keep your mobile phone to hand. It allows you to keep in touch with someone at home and also provides an escape if necessary for you to contact someone. You should decide if you wish to treat male clients. Lone therapists feel more comfortable working on women only, others choose to take male clients that they know. Trust your instincts and if you feel uncomfortable remove yourself from the situation.

## **Working from home**

If you are working from home, make sure you can see who you are letting in. If you do not recognise the person or they do not confirm their name you should refuse entry. You should keep your treatment room separate from the rest of your home. If you imply that somebody else is home, clients are less likely to become aggressive. If you feel threatened in any way you should terminate the appointment and ask them to leave straight away. If you are in their home, you should leave immediately. Remember if necessary to report any incidents to the police as soon as possible. Do not let personal fears hold you back from a great career. Many therapists never come across these situations, simply remember to be in your guard and avoid dangerous situations.

## **Dealing with clients**

When dealing with clients in a salon you should always speak clearly and concisely during a treatment. This means that your client is not disadvantaged if they are from another cultural or religious background, are a different age or gender or have disabilities. After you have completed consultation you should check to make sure that your client has understood what you have said. Your body language can also be used to demonstrate your professionalism, allowing your client to feel more comfortable when answering your questions.

## **Insurances & Memberships**

Before offering treatments to paying members of the public, you should ensure that you are fully insured. This will give you financial protection in case something goes wrong with the treatment, subject to the

terms and conditions of the policy. It is also advisable to become a member of a professional body such as the guild. They offer many valuable member benefits and offer a professional code of ethics.

There are different types of insurance membership cover which therapists may require in order to carry our professional treatments. It is important to understand which type of insurance you need and this information can be obtained by talking to your insurance provider to ensure it meets your individual requirements.

#### -Treatment Liability

Covers you in the event of a claim being made against you by a client who you may have injured during the course of a treatment, examples include burns, scarring etc.

#### -Public Liability

Covers the insured therapist in the vent of a client injuring themselves whilst in the treatment room, for example tripping or slipping.

#### -Product Liability

Covers you in the event of a client claiming that a product used in the treatment room or sold to her for home use has caused an injury or reaction.

#### -Employers Liability

If you employ staff you will need to have by law employers liability insurance. Employers are responsible for the health and safety of their employees while they are at work, so this insurance is compulsory. Employers liability covers you against claims that may arise from employees if they are injured at work or suffer work related illnesses and found that you were liable.

#### -Stock & Equipment Insurance

You may also wish to ensure your equipment and professional/retail products against damage flood or theft.

#### -Insurance

If you are the owner of a high street salon you will need to seek information about additional insurances you may require



## Pregnancy Massage

### Hygiene

As a therapist you are constantly coming into contact with various members of the public. It is imperative that you work hygienically at all times, and keep your tools and equipment clean and sterilised where possible to prevent any cross contamination. You must protect yourself as a therapist, and also your customers. It is your responsibility to carry out a consultation with every customer you have which enables you to clearly assess any health issues from the information they give you as well as visually checking the hands or feet before beginning the treatment. Always wash your hands before and after every treatment. All disposable equipment should be disposed of after use, and any sterilisable tools should be sterilised before/after every use. Ensure that you are suitably dressed to carry out the treatment, and that your area is clean, tidy and free from hazards.

- Hands should be washed with antibacterial soap before and after each treatment
- Fingernails should be short with no varnish or extensions
- Disposable gloves should be worn when necessary
- Long Hair should be tied back
- No jewelry should be worn (except wedding band)
- Disposable paper should be used on trolleys and couches
- Use clean towels for each client
- Spatulas should be used for removing product from containers
- Implements should be cleaned and sterilised

To minimise Cross infection:

- Ensure you can recognize the sign of an infection
- Avoid contact which could put you or a client at risk
- Dispose of all materials in sealed bags
- Use disposable equipment where possible

## Sterilisation Methods

There are several ways to sterilise and sanitise your tools. Tools must be washed with warm soapy water before being sterilized, as sterilisation will not remove dirt/skin or product from the tools.

**Sterilisation:** Destruction of all living organisms.

**Sanitisation:** Destruction of some, but not all micro-organisms. Suitable for tools which do not come into contact with blood or bodily fluids.

**Wet Sanitation:** Barbicide is a diluted solution in which tools should be left for at least 15 minutes at room temperature. Barbicide is known to kill fungus, bacteria and also immune diseases such as HIV & hepatitis. This method is ideal for sanitising tools such as nail clippers, cuticle nippers, scissors and cuticle knives.



**Dry Sanitation:** UV Cabinets are a suitable method of keeping sterilized tools in a sterile condition until they need to be used. Implements are simply laid out under a UV light for 30 minutes. The UV only kills bacteria on the surfaces it covers, so tools will need to be turned to ensure all surfaces are kept sanitised.



**Heat Sterilisation:** Autoclaves are a fantastic method of sterilisation by method of bringing implements up to extremely high temperatures of 121 degrees centigrade or more in a pressurised steam cabinet to kill any bacteria. This method is not suitable for plastic implements though – only metal! They are very costly, but very good. Another heat method is the glass bead sterilizer, a smaller cheaper alternative where tools are immersed into small glass beads that are bought up to a high temperature. Again this method is only suitable for metal implements.



the

## **Contra Indications/Restrictions/Contra Actions**

A contra indication is a reason to withhold or adapt a treatment so as not to cause harm or spread infection. For example, if your customer had any diseases or disorders of the skin or nails.

As you check your clients record card you should look out for any reasons that may require you to withhold or adapt the treatment.

Contra indications for pregnancy massage would include:

Partial contra indications include:

- Abdominal massage at any time during the pregnancy
- Areas of recent scar tissue
- Open Wounds
- Varicose Veins (Always massage from above, avoid pressure being placed on the vein)

Total Contra Indications:

None of the conditions below should be treated without medical consent

- Heart Conditions, Pacemakers, High Blood Pressure
- Gestational Diabetes
- Recent Major Operations
- Urinary Infections, Kidney Disorders
- HIV, Hepatitis, Cancer
- Sprains, Bruising, Swelling
- Severe skin disorders
- Contagious infections such as scabies, ring worm, verruca's
- Discharge of blood
- Nausea or vomiting
- High risk of miscarriage/High risk pregnancy (placental abruption for example)
- Diagnosed or suspected Eclampsia
- Ruptured amniotic membrane

To make it clearer, we have divided these into three categories:-

## CONTRA-INDICATIONS TO PREGNANCY MASSAGE

### **Do not proceed without written permission from medical practitioner:-**

- Diabetic mother
- Cardiac disorders – heart disease
- Chronic Hypertension
- Previous problems in pregnancy – previous miscarriage
- Mothers under 20 or over 35
- Asthmatic mother
- Suspected RH negative mother or other genetic problems
- Drug addictions or exposure to drugs
- Previous multiple births

### **Proceed with caution:- (written permission advised)**

- Incompetent cervix
- Lung or liver disorder
- Severe anaemia
- Convulsive disorders
- Abnormal foetal heartbeat
- Decrease or absence of foetal movement
- Interuterine growth retardation
- Lupus erythematosus
- Poor lifestyle habits (drug abuse, poor nutrition, smoking, alcohol consumption)
- Low weight gain
- No prenatal care

### **Warning Signs of High Risk Factors**

- Possible miscarriage – bloody discharge, continual abdominal pains, sudden gush of water or leakage of amniotic fluid.
- Urinary tract infections – very frequent urination with burning, low back pain, increase in thirst and decrease in urination, chills and fever with 100 degree temperature or higher.
- Pre-eclampsia – toxemia or pregnancy – if neglected or not treated properly may develop true eclampsia. Sudden rapid weight gain, systemic oedema, increased blood pressure (hypertension), protein in urine, increased headaches.

- Eclampsia (Toxemia) **Emergency situation – refer to physician immediately.** Develops in 1 out of 200 patients with pre-eclampsia; persistent severe headaches, persistent severe back pain unrelieved by change of position, severe nausea/vomiting, systemic oedema, pitted oedema, increased blood pressure, visual disturbances, convulsions.
- Gestational Diabetes – excessive hunger and thirst, increased urination in 2<sup>nd</sup> trimester, sugar in urine, no non pregnant diabetes.
- Other conditions – thrombophlebitis, system infections, skin irritations, varicose veins, kidney disease, heart disease, cancer, acute injuries such as burns, bleeding, fractures.

### **Total contraindications – not suitable to massage at all**

Massage is totally contraindicated for pregnant women who are experiencing cramping, bleeding or abdominal or pelvic pain.






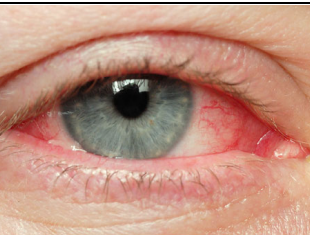
- Hypersensitive skin
- Inflammation
- Viral infections
- Any contagious disease, eg scabies, impetigo, herpes, chickenpox, tinea, mumps, diphtheria, typhoid etc
- Severe widespread psoriasis, eczema or dermatitis
- High temperature or fever
- Undesirable character or anyone whom you may feel threatened by

### **MASSAGE THERAPIST - MASSAGE RESTRICTIONS**

- Abdominal massage totally contraindicated for 1<sup>st</sup> trimester and limited to effleurage for remainder.
- Gymnastics/ROM – do not do movements when nausea present, or when symphysis pubis separates in the 2<sup>nd</sup> trimester.
- Pressure point around ankles and Achilles tendon should be avoided.
- Pressure point between thumb and finger should be avoided.
- Swedish strokes that affect circulation should not be used in the 3<sup>rd</sup> trimester if the client has a heart condition.
- Tapotement contraindicated on the legs because of the increased danger of blood clots during pregnancy.

**If in doubt, always refer client to GP.**

## Skin Diseases & Disorders

Skin Disease/Disorder	Image
<p><b>Scabies</b> Looks like tiny insect bites or spots. It can be extremely itchy and is caused by small mites burrowing under the skin. Scabies can be caught very easily.</p>	
<p><b>Ringworm</b> A fungal skin infection. Itchy red raised scaly patches in the characteristic ring shape. Spreads easily from one person to another.</p>	
<p><b>Head Lice</b> Wingless insects that are grayish brown in colour. They grow to approx 3mm in length. They are spread by head to head contact</p>	
<p><b>Impetigo</b> A bacterial skin infection of the surface skin layers causing blistering and scabbing. Highly contagious.</p>	
<p><b>Cold Sores</b> Small blisters usually around the mouth on the lips. They are caused by the herpes simplex virus. Highly contagious by close contact</p>	
<p><b>Conjunctivitis</b> Bacterial infection of the tissue that covers the front of the eye (conjunctiva). Itchiness, redness, swelling and weeping. Easily spread.</p>	



<p><b>Eczema</b></p> <p>A condition which causes dry, red, itchy and sometimes flaky skin. Common behind the knees, elbows, Side of the neck and around the eyes. The condition is not contagious, but may be irritated by some products.</p>	
<p><b>Dermatitis</b></p> <p>Inflammation of the skin that occurs when it comes into contact with certain substances. Red, itchy, scaly skin that sometimes burns and stings. It can be Allergic or Irritant. Not contagious but may be sensitive to certain products.</p>	
<p><b>Skin Cancer</b></p> <p>Varying skin growths. Skin cancer generally develops in the Epidermis, so the growth can usually be seen. Signs are changes to the skin that do not heal. If there is any doubt what so ever you should refer your client to see their G.P and avoid treating until you have written consent from their practitioner.</p>	 <p>1. a. Squamous cell carcinoma b. Keratoacanthoma c. Basal cell carcinoma</p> <p>2. a. Basal cell carcinoma b. Seborrheic keratosis c. Bowen's disease</p> <p>3. a. Actinic keratosis b. Keratoacanthoma c. Pilomatricoma</p> <p>4. a. Nodular melanoma b. Lentigo maligna c. Basal cell carcinoma</p> <p>5. a. Superficial spreading melanoma b. Acral-lentiginous melanoma c. Eccrine poroma</p> <p>6. a. Bowen's disease b. Seborrheic keratosis c. Squamous cell carcinoma</p>
<p><b>Warts</b></p> <p>Small growths on the skin caused by the human papilloma virus. They are characterized by a cauliflower type appearance. Warts are a contagious viral condition.</p>	

**As a therapist you are not qualified to diagnose a medical condition and therefore if you are in any doubt whether a treatment should be carried out you should refer the client to their GP for advice.**



## **Contra Actions**

A contra action is something that occurs during or after a treatment

- Change of temperature
- Lowered Blood Pressure
- Sweating
- Aching Muscles
- Lethargy
- Increased thirst / urination
- Headaches
- Emotional ups /downs
- Cold Symptoms
- Erythema
- Allergy

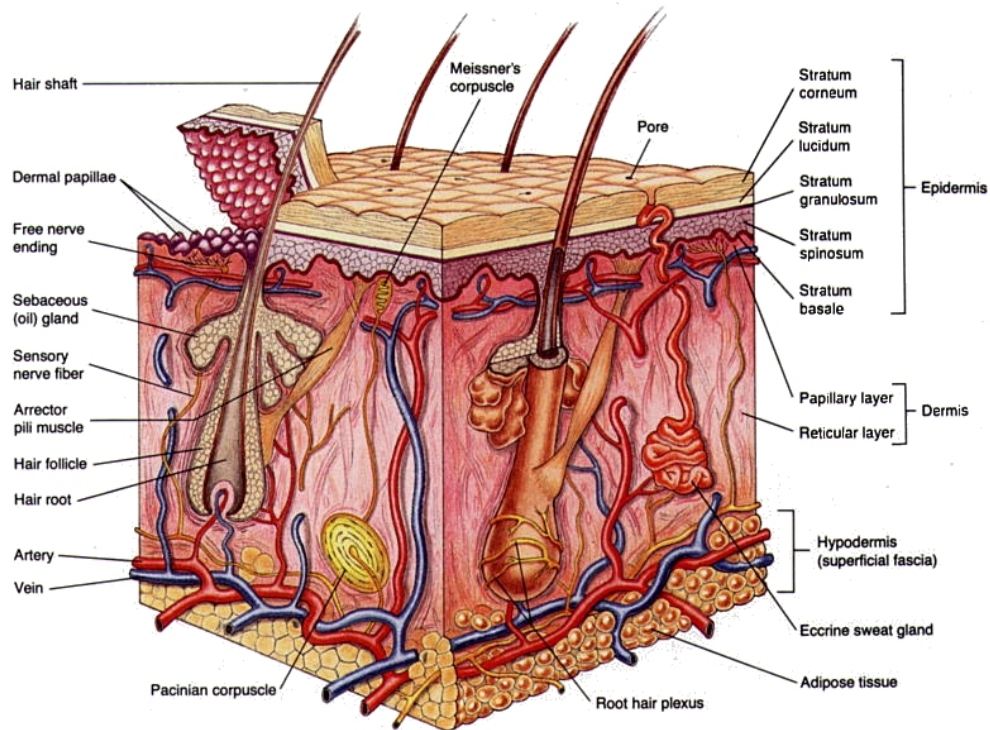
Any severe reactions following a treatment should be recorded, and your client should seek medical advice from his/her General Practitioner.

## **Healing Crisis**

A healing crisis can occur after treatment. It is described as symptoms becoming worse short term, before improving. This is a sign of the body healing itself and detoxifying. Try to rest as much as possible, after a treatment, and to eat a light and healthy meal, to enable the body to heal and settle. Avoid alcohol and caffeine drinks. Should a side effect last for more than 24 hours the client should inform the therapist and seek medical advice.

# Anatomy & Physiology

## The Skin



The skin is the largest organ of the body and has many varied functions. It is self-healing, and self-replacing. Our skin becomes darker in colour to protect from excessive sunlight. Skin is vital in the production of Vitamin D, and regulation of our body temperature.

Functions:

SHAPES & Vitamin D production

- Sensory
- Heat Regulation
- Absorption
- Protection
- Excretion
- Secretion

**The skin has 3 main layers**

- The Epidermis (Top Layer)
- The Dermis (Middle Layer)
- Subcutaneous Layer (Basal Layer).

The **Epidermis** is the outermost layer that you can see, and varies in thickness. This section is subdivided into 5 smaller layers:

1. **Stratum Corneum** (Horny Layer)  
\*25-39 Cells deep, flat dead horny keratinized cells no longer containing a nuclei. These cells are continuously rubbed away and replaced by new cells from beneath
2. **Stratum Lucidum** (Clear Layer)  
\*Clear in appearance, the cells have no nuclei and are almost completely keratinised
3. **Stratum Granulosum** (Granular Layer)  
\*2 to 3 layers of cells which contain granules of keratin. This is a protein found in skin, hair and nails, horns & hooves. Keratinisation takes place and cells lose moisture and flatten
4. **Stratum Spinosum** (Prickle Cell Layer)  
\*8 to 10 layers of cells bonded together by threads. Blood cells and melanin move between them. Contain granules of melanin which continue to move upward with the cell
5. **Stratum Basal** (Basal Layer)  
\*Cell Division (mitosis) takes place continually, and the cells move upwards. It takes around 40 days for the cells to move from base layer to the surface. Nutrients are obtained from blood supply in the dermis below. Melanocytes produce skin pigment known as melanin which helps to protect the skin from harmful rays

The **Dermis** (Middle layer) contains sweat glands, sebaceous glands, nerve fibres, nerve endings, blood vessels, capillaries and hair follicles. Consists of two layers.

**1. Papillary Layer**

Immediately under the epidermis and contains many blood capillaries which bring fresh oxygen and nutrients to the epidermis.

**2. Reticular Layer**

Contains hair follicles which produce and grow hairs, sebaceous glands which secrete sebum providing a protective acid mantle for the skin, Apocrine sweat glands which produce sweat and are usually attached to hair follicles, eccrine sweat glands which produce a watery sweat all over the body to help temperature control (cooling the body). Receptors, nerves that sense pain, pressure hot & cold. Collagen & Elastin fibres which gives our skin strength and elasticity.

The **Subcutaneous** (basal layer) is under the dermis and is a layer of adipose tissue (fat cells) which act as a food store and help to keep the body warm and protect us.

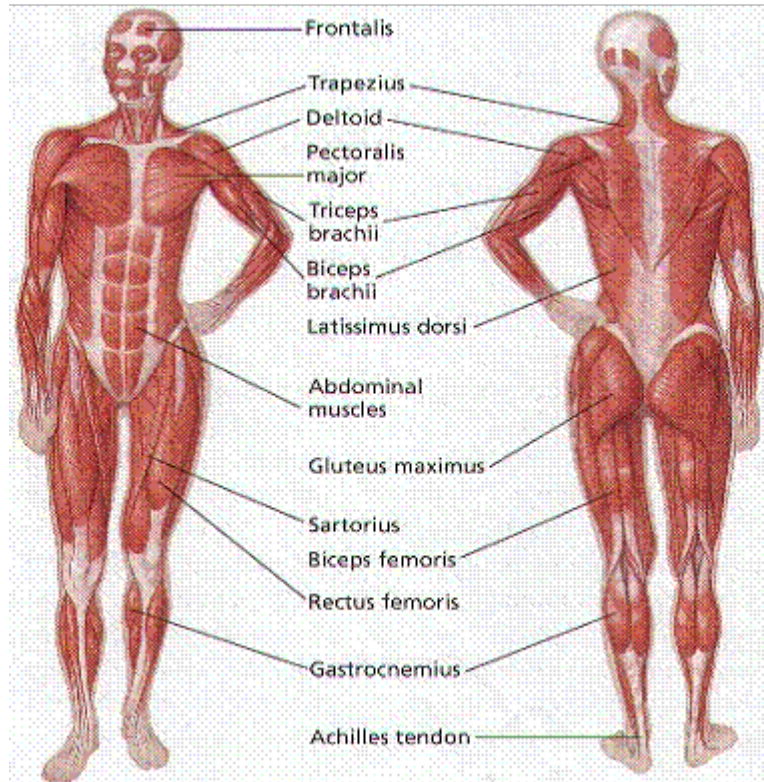
**The Acid Mantle**

The acid mantle is a mix of sweat and sebum on the surface of the skin which acts as a protective barrier against bacteria. It also acts as a natural moisturiser and waterproof covering.

**Adipose Tissue**

Adipose tissue is a type of loose connective tissue containing cells which are adapted to store fat. It is mostly found under the skin and around the organs. It acts as a reserve of food and helps to maintain body temperature by preventing heat loss. Massage softens the adipose tissue and helps to disperse it into the deeper layers of tissue and circulatory system. Distribution of the fatty layer varies according to gender, age and lifestyle. Women tend to have a thicker layer than men.

## The Muscular System



## Types of Muscle Tissue

<b>Muscle Type</b>	<b>Structure</b>	<b>Function</b>
Cardiac Muscle	Short striped cylindrical cells which are branched	Rhythmical beating of the heart
Involuntary Muscle	Spindle shaped smooth cells	Contracts walls of blood vessels and internal organs
Voluntary Muscle	Long striped cells	Contracts strongly when stimulated to provide voluntary movement

One of the major benefits of massage is the ability to relax the muscles and relieve tension. The muscles within the body have various roles. Some produce movements as they contract, and others act as a support holding a limb or area of the body in a fixed position.

During exercise muscles collect sufficient energy by oxidizing glucose in the body. As exercise progresses or increases there is no longer enough oxygen available, so energy is now produced from glucose anaerobically. A waste product called lactic acid builds up in the muscles which

slows them down and sometimes causes cramp. Massage aids the removal of lactic acid from the muscle by increasing lymphatic drainage – a waste removal system.

Good muscle tone is achieved by exercising. Massage also helps to keep muscles toned, particularly hacking or movements which stretch the muscle fibres. The pressure of your massage should always be adapted to suit the needs of your client. i.e. you wouldn't massage an elderly lady in the same way you would a sports man.

### **Muscle Types**

**Extensors** – Extend a limb

**Flexors** – Flex a limb

**Adductors** – Bring limb towards body

**Abductors** – Move limb away from body

**Sphinctor** – Surround an orifice (i.e. eye socket)

**Supinator** – Turns limb to face upwards

**Pronator** – turns limb to face downwards

**Rotators** – Rotate the limb

### **Actions of Specific Muscles**

<b>Muscle</b>	<b>Position</b>	<b>Action</b>
Frontalis	Covers forehead	Raises eyebrows, wrinkles forehead
Temporalis	Covers temporal bone at sides of head to jaw	Raises and retracts lower jaw, aids mastication
Corrugator	Inner corner of the eyebrows on socket line	Draws eyebrows together
Buccinator	Angle of jaw, to corner of mouth	Compresses cheeks, aids mastication
Risorius	Supports Buccinator	Retracts mouth
Masseter	Fleshy parts of cheeks	Raises lower jaw, aids mastication
Obicularis Oculi	Forms Sphinctor around eye	Closes eyelids
Zygomaticus	Covers Cheek bone	Raises corners of mouth
Mentalis	Centre of chin	Wrinkles the chin
Obicularis Oris	Forms sphincter around mouth	Closes mouth
Sternocleidomastoid	Tendinous muscle at sides of neck	Flexion of neck

Platysma	Covers the neck	Draws down lip and jaw in yawning.
Occipitalis	Covers occipital at back of neck	Draws scalp backwards
Nasalis	Sides of nose	Compresses and dilates the nostrils
Triangularis	Lower corner of mouth to jaw	Draws down corners of mouth
Digastric	Under the chin	Aids swallowing
Procerus	Bridge of nose	Wrinkles across bridge of nose
Trapezius	Large triangular muscle at top of back	Elevates and abducts shoulder, rotates scapula
Deltoid	Forms cap of shoulder	Abduction of shoulder
Serratus Anterior	Covers sides of ribs	Stabilises shoulder, forward rotation of scapula
Rhomboids	Four sided muscle between scapula and spine	Adducts scapula towards spine
Teres Major	Small muscle between scapula and humerus	Adducts arm, rotates inwards
Teres Minor	Small muscle between scapula and humerus	Rotates arm outwards
Levator Scapulae	Tendinous muscle from base of skull to scapula	Elevates shoulder, rotates scapula
Subscapularis	Large muscle under scapula	Inward rotation of humerus
Supraspinatus	Small muscle above scapula	Abduction of shoulder
Infraspinatus	Below spine of scapula	Stabilises shoulder socket, outward rotation of humerus
Biceps	Inside of upper arm	Flexion of arm at elbow, supination of forearm
Brachialis	Deep to biceps	Flexion of arm at elbow
Triceps	Outside of upper arm	Extension of arm at elbow
Pronator Teres	Crosses lower forearm	Pronates forearm to hand
Superficial Extensors	Lower arm from elbow to digits	Extension of wrist and fingers
Deep Extensors	Lower arm from elbow to thumb and forefinger	Extension of thumb and forefinger
Superficial Flexors	Lower Forearm across palm to fingers	Flexion of wrist and fingers
Deep Flexors	Lower forearm across palm to fingers	Flexion of thumb and forefinger



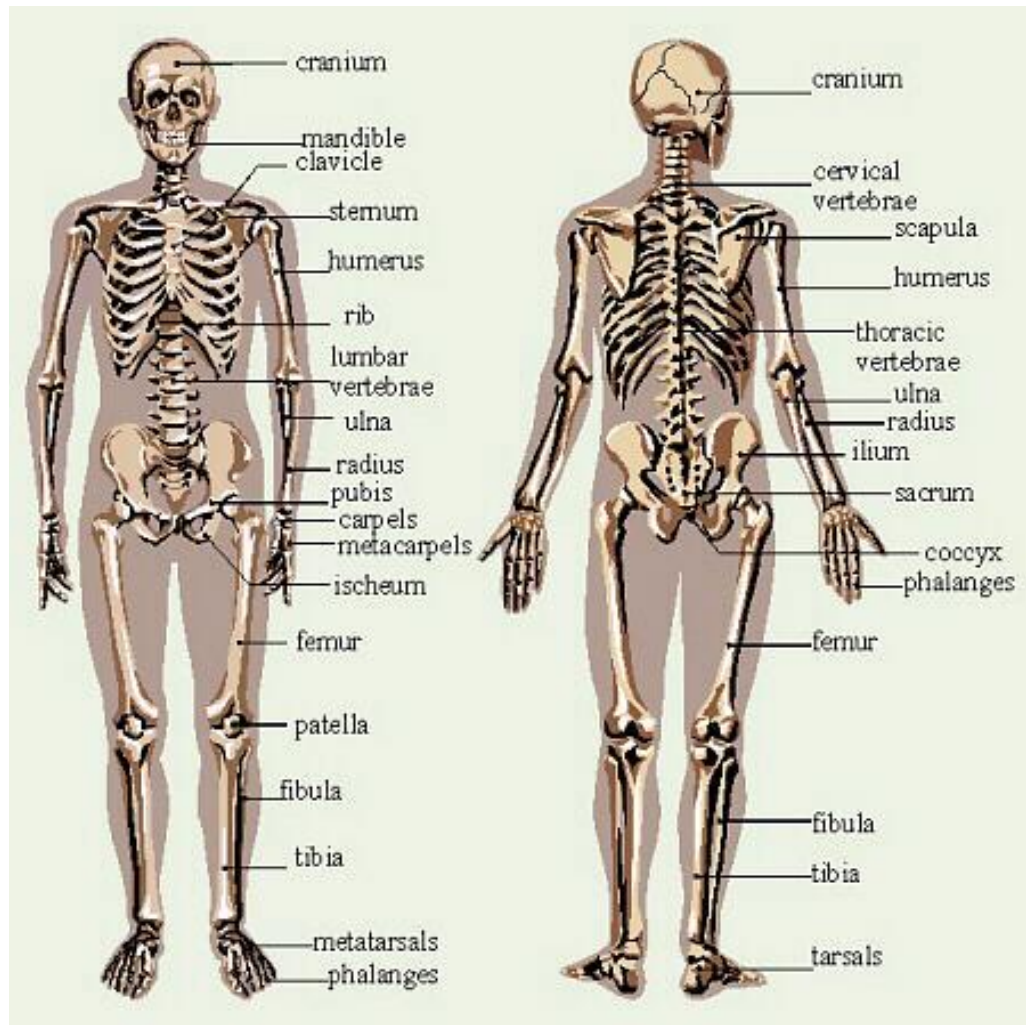
Hamstrings - Biceps Femoris - Semitendinosus - Semimembranosus	Group of muscles at back of thigh	Extension of hip, flexion of knee, lateral rotation of femur when semi flexed
Quadriceps Femoris - Rectus Femoris - Vastus Lateralis - Vastus Intermedius - Vastus Medialis	Group of muscles at the front of thigh	Extension of knee, and flexion of hip
Adductors	Inner Thigh	Adduction, lateral rotation of femur
Tensor Fasciae Latae	Outer Thigh	Abduction of thigh and hip, flexion of knee, lateral rotation of femur
Sartorius	Crosses thigh from outer hip to inside knee	Flexion and abduction of hip, flexion of knee, lateral rotation of femur
Tibialis Anterior	Front of tibia on lower leg	Dorsiflexion and supination Of ankle, inversion
Tibialis Posterior	Back of tibia on lower leg	Plantar flexion and inversion
Gastrocnemius	Large calf muscle	Flexion of knee, plantar flexion of ankle
Soleus	Deep to Gastrocnemius	Plantar flexion
Pectoralis Major	Large Chest Muscle	Adduction, inward rotation of the arm
Pectoralis Minor	Thin chest muscle deep to pectoralis major	Depression of scapular
Diaphragm	Dome shaped muscle beneath ribcage	Flattens to create more room in the thorax during inhalation
Intercostals	In between ribs	Pulls ribs up and out during inhalation, maintains shape of thorax
Rectus Abdominus	Six – Pack muscle running down abdomen	Ventral flexion of trunk
External Obliques	Forms waist by crossing with internal obliques	Flexes trunk ventrally, rotation of trunk
Internal Obliques	Forms waist by crossing with external obliques	As above
Transversus	Across the abdomen	Forced expiration, vomiting
Erector Spinae	Long muscle running either side of spine	Extension of spine, lateral flexion of trunk, pulls head back, erects posture



Latissimus Dorsi	Covers back of lower ribs	Adduction of arm at shoulder, depression of shoulder
Quadratus Lumborum	Square muscle of lower back	Adduction of arm at shoulder, depression of shoulder
Iliopsoas - Psoas - Iliacus	Extends from pelvis to back of femur	Flexion of hip, stabilizes lower back
Gluteus Maximus	Large muscle of buttocks	Adducts Hip, outward rotation of thigh, extension of knee
Gluteus Medius	Medium sized muscle at back of hips	Abduction and rotation of hip
Gluteus Minimus	Smaller muscle deep to gluteus medius	Abduction and rotation of hip

the school of fine tuning

## The Skeletal System



### **Functions of the skeletal system:**

- Gives body height, support and allows movement
- Forms a protective cover for areas such as skull and ribcage
- Produces red blood cells in marrow cavities, and stores calcium
- Transmits sound waves
- Attachment of muscles
- Levers to thrust against the ground to perform walking (locomotion)

### **Types of Bone:**

There are four types of bone,

- Long
- Short
- Flat
- Irregular

### **Types of joints:**

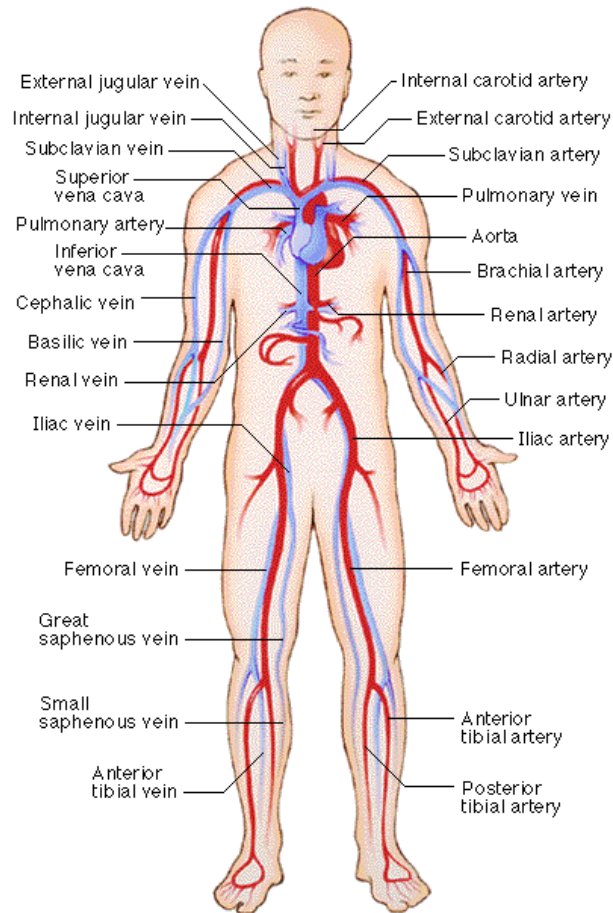
- Fixed fibrous joints i.e. bones of the skull
- Cartilaginous slightly moveable joints i.e. pelvis
- Synovial freely movable joints i.e. Ball and socket, Hinge, Pivot and gliding joints

### **Types of joint Movement:**

- Gliding i.e. the close bones in the hands and feet
- Angular i.e. flexion, extension, abduction and adduction
- Rotation i.e. the pivoting of a bone on its own axis
- Circumduction i.e. bone that follows an imaginary cone shape as it moves

the school of fine tuning

## The Circulatory System



## Circulation

Massage increases the blood circulation which causes skin temperature to rise and increased colour to appear in the skin (erythema).

The main function of the circulatory system is transportation, with food and oxygen being carried to all the cells of the body. It also plays a vital role as a defence against infection, and is vital to our survival. All these functions occur through our circulatory systems transportation network of arteries, veins and capillary vessels. All arteries except the pulmonary artery and its branches carry oxygenated blood from the heart, and distribute it around the body. Veins function as collectors, returning deoxygenated blood from the capillaries to the heart.

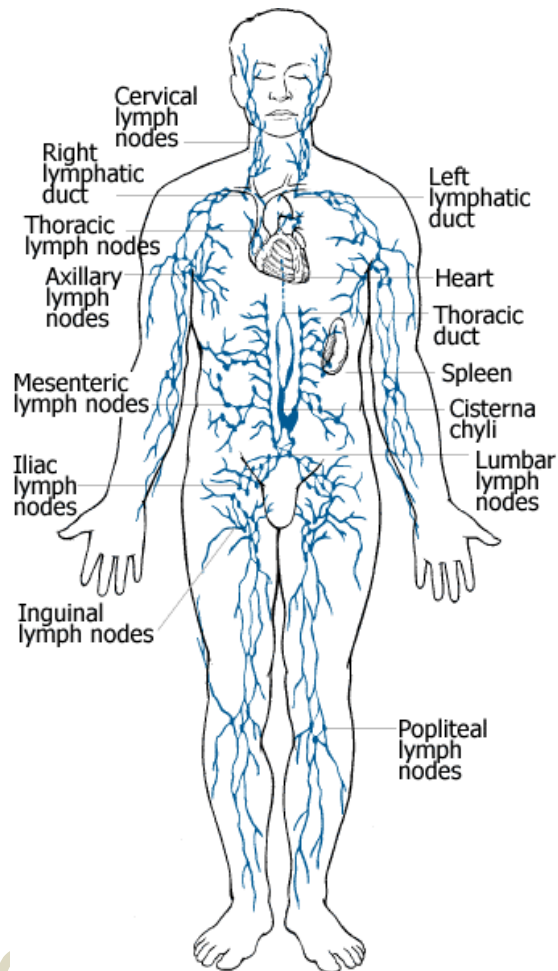
The capillaries allow the exchange of tissue fluids to take place, and allow essential nutrients to reach the cells of the body. Their walls are made up of a single layer of endothelial cells which allow water, oxygen, minerals, glucose, glycerol, vitamins and amino acids to pass through. It also allows waste products such as carbon dioxide and urea to be carried away via the capillary network. The heart acts as a pump, keeping the blood moving around the system of vessels to meet physical demand.

#### **Functions of the blood**

- Carries oxygen to the cells
- Transports hormones
  - Carries nutrients
- Removes waste products
- Aids regulation of body temperature
- Carries white blood cells and antibodies to fight infection
  - Supplies clotting mechanism to protect the body

the school of fine tuning

## The Lymphatic System



Working alongside the circulatory system, to make up the vascular system.

Unlike the circulatory system, the lymphatic flow is not moved around the body by the pumping of the heart. It relies purely on movement of the individual, and mechanical methods such as massage. As the blood circulates through the capillaries, fluid passes through their walls into the tissues bathing individual cells with nutrients. Acid absorbs the cells waste products, some of which returns into the blood stream, but most is collected by the vessels forming the lymphatic system.

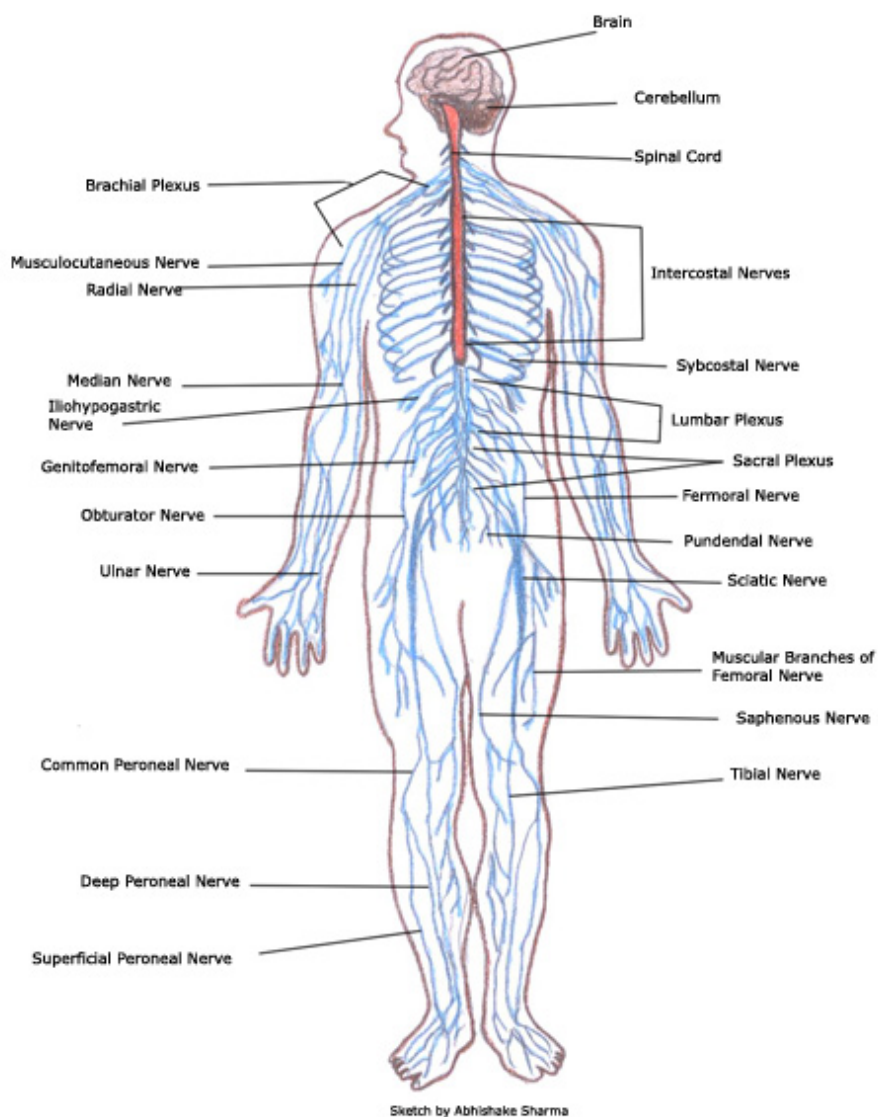
These vessels contain lymph, a clear to yellowish coloured fluid, similar to blood plasma. Lymph contains absorbed fats, urea, sugar, glucose, salts, lymphocytes and some plasma protein. At intervals within the lymphatic system, lymph node occur. They are small oval bodies which act like filters, and also form lymphocytes. The lymphatic system is a drainage system, draining the fluid from the tissues via its capillaries and two main ducts, and returning it purified into the blood stream. Lymph transport is propelled along by pressure on skeletal muscles and by small valves in vessels. It is at low pressure when it enters the venous system.

### **Functions of the Lymphatic System**

- Returns fluid and proteins from tissues to the blood
- Transports lymphocytes from lymph nodes to the circulation
- Carries fatty foods from intestines to circulation
- Filters and destroys micro organisms to prevent spread of infection
- Produces antibodies to prevent subsequent infection

the school of fine tuning

## The Nervous System



**Nervous System Diagram**

The nervous system is divided into two main parts,



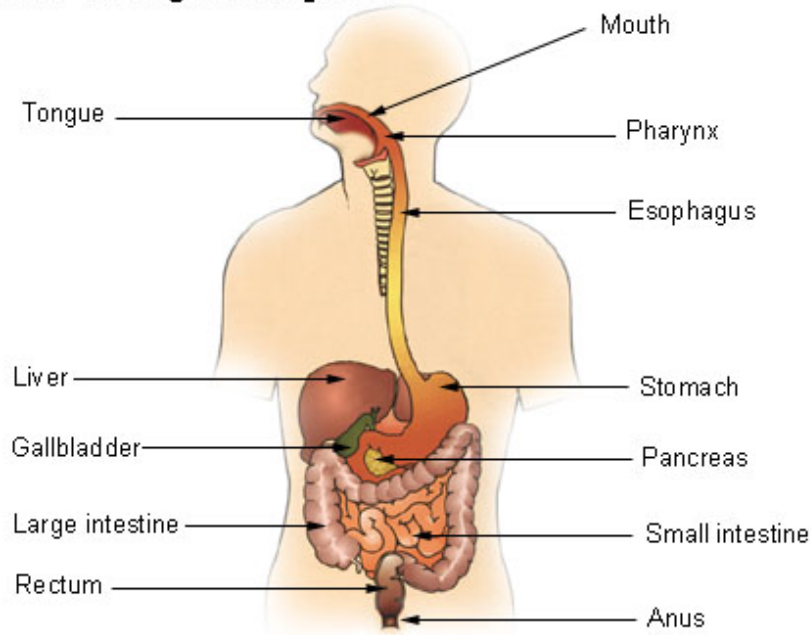
- 1) The Central nervous system – This controls the five senses: Seeing, Smelling, touch, tasting and hearing. And it also controls the voluntary muscle actions e.g walking and talking etc.
- 2) The Automatic nervous system – This includes the parasympathetic and sympathetic systems. It controls involuntary bodily activities, the internal organs and blood vessels.

A good supply of nerve energy depends on proper nutrition, exercise, oxygen, rest and relaxation. Nerve fatigue can be caused by excessive mental or muscular strain. Symptoms would include weariness, irritability, dull eyes etc. Nerve fatigue can be combated by stimulating the nervous system with massage, light rays or heat.

the school of fine tuning

## The Digestive System

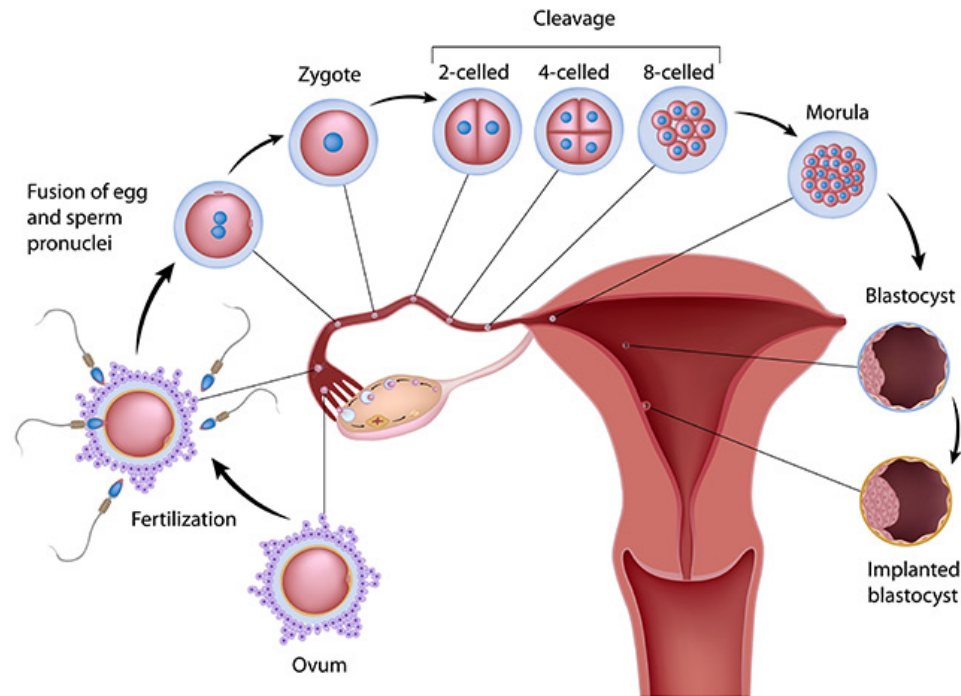
### Organs of the Digestive System



All foods start the digestion process in the mouth. In the mouth solid food is broken down by mastication (chewing and grinding) and mixed with saliva which begins the breakdown of starches. It then passes into the oesophagus and by peristaltic action (contraction of muscles) passes to the stomach.

When the food reaches the large intestine, it is acted upon by chemicals which convert it from complex insoluble substances to more simple substances which can be absorbed into the blood stream, mainly by the small intestine. When working on the abdomen, always work in a clockwise direction, working with digestion.

## A&P During Pregnancy



There are four main stage of a pregnancy.

- Fertilisation
- Implantation
- Embryonic Growth
- Foetal Growth

Pregnancy usually lasts around 40 weeks from the first day of the woman's last period/menstrual cycle (or 38 weeks from conception)

The pregnancy is then divided into three trimesters, each lasting approximately 3months.

### The first trimester 0-3months

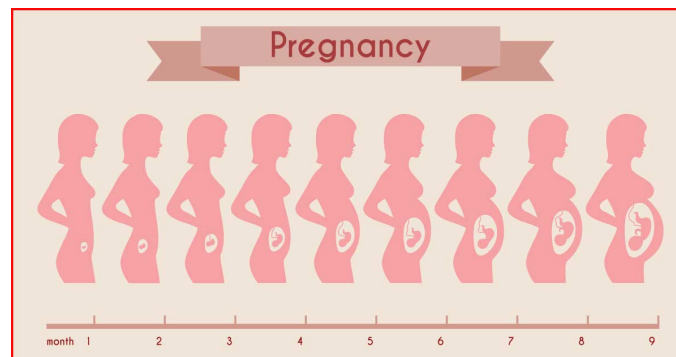
- The embryo implants and secures itself into the lining of the uterus
- The most vital stage
- The time of most hormonal changes
- The embryo grows from a single cell into a fully formed foetus in only 12 weeks
- By the end of this trimester all of the organs, muscles, limbs and bones are formed

### The second trimester 4-6months

- The foetus is fully formed and is now growing and maturing
- This stage is a time of massive growth
- During the second trimester specifics such as fingerprints, toes, fingernails, eyebrows and eyelashes and a firm hand grip develop
- The foetus can even grimace and frown at this stage
- Blood volume within the mother increases
- Cardiac output, breathing rate and urine production increases in response to foetal demand
- The uterus enlarges during pregnancy, along with the size of the breasts
- Appetite increases in response to foetal demand and need for increasing nutrients

### The third trimester 7-9months

- During the third trimester the foetus develops a sense of hearing, practices breathing motions and learns to focus and blink its eyes.
- The foetus is fully formed and puts on weight during the last few weeks of the pregnancy
- Posture changes are evident at this stage as the mother gains more weight and the internal organs are compressed
- The structure of the connective tissue within the body alters by softening, in readiness for the birth



## Changes to the Body

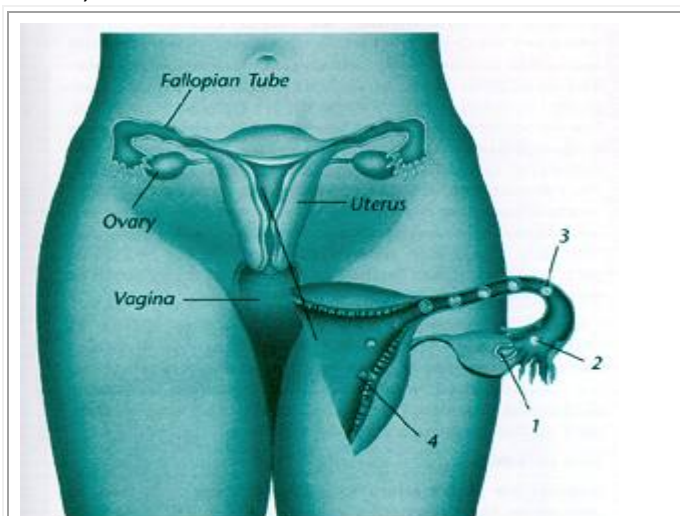
Pregnancy is a time of major change. From the very start, the baby-to-be (fetus) alters the body and the way you live. For the entire pregnancy, the baby depends on the mother for all the things it needs to grow and thrive. Although each pregnancy is unique, the growth and development of a fetus take place in a fairly standard pattern. Month by month, mother and baby prepare for birth and a new life.

## A New Life Begins

A woman's egg is fertilized by a man's sperm in the fallopian tube. During the next few days, the fused egg and sperm move through the fallopian tube to the lining of the uterus. There it implants and starts to grow.

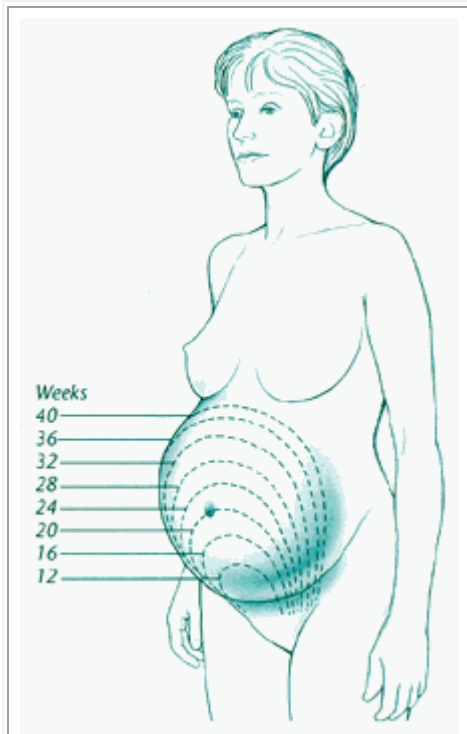
The cluster of cells that reaches your uterus will become the fetus and the placenta. The placenta functions as a life-support system during pregnancy. It delivers oxygen, nutrients, and hormones from mother to fetus.

Knowing how your baby grows and develops can help you prepare for the coming weeks.



*Each month during ovulation an egg is released (1) and moves into one of the fallopian tubes (2). If a woman has sex around this time, an egg may meet a sperm in the fallopian tube and the two will join (3). The fertilized egg then moves through the fallopian tube into the uterus and becomes attached there to grow during pregnancy (4).*

During pregnancy, the lining of a woman's uterus thickens and its blood vessels enlarge to nourish the fetus. As pregnancy progresses, the uterus expands to make room for the growing baby. By the time your baby is born, your uterus will be many times its normal size.



*Even early in pregnancy, the size of your uterus can help show how long you have been pregnant. The uterus fits inside the pelvis until the 12th week. By the 36th week, the top of the uterus is under your rib cage.*

## Changes During Pregnancy

Many changes begin taking place inside your body as your baby grows. You won't see most of these changes at first. There's no doubt you'll feel them. If you have concerns or questions about what your body is going through, talk with your doctor. He or she can offer tips for dealing with pregnancy changes and also assure you that most of what you are feeling is normal and determine what may not be normal.

### The Due Date

A normal pregnancy lasts about 280 days (about 40 weeks), counting from the first day of your last menstrual period. A normal range, however, is from as few as 259 days to as many as 294 days (37–42 weeks). The 40 weeks of pregnancy are divided into three trimesters. These last about 12–13 weeks each (or about 3 months):

1st trimester: 0–13 weeks (Months 1–3)

2nd trimester: 14–27 weeks (Months 4–6)

3rd trimester: 28–40 weeks (Months 7–9)

The day your baby is due is called the "estimated date of delivery," or EDD. (The estimated date of confinement, or EDC, is a term that also is sometimes used.) Although only about 1 in 20 women deliver on their exact due date, your EDD is useful for a number of reasons. It is used as a guide for checking your

baby's growth and your pregnancy's progress. The EDD gives a rough idea of when your baby will be born. Most women go into labor within about 2 weeks before or after their due date.



## CHANGES IN THE MOTHERS BODY DURING PREGNANCY

### The First Trimester

Your period stops.

Your breasts may become larger and more tender.

Your nipples may stick out more.

You may need to urinate more often.

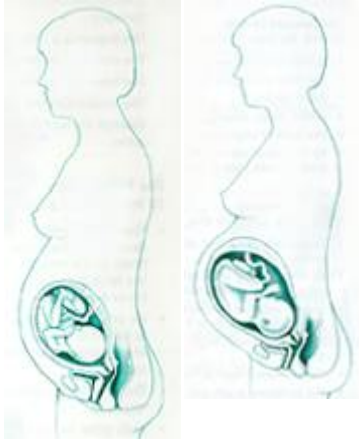
You may feel very tired.

You may feel nauseated and even vomit.

You may crave certain foods or lose your appetite.

You may have heartburn or indigestion.

You may be constipated.



## The Second Trimester

Your appetite increases and nausea and fatigue may ease.

Your abdomen begins to expand. By the end of this trimester, the top of your uterus will be near your rib cage.

The skin on your abdomen and breasts stretches and may feel tight and itchy. You may see stretch marks.

Your abdomen may ache on one side or the other, as the ligaments that support your uterus are stretched.

A dark line, the linea nigra, may appear down the middle of your stomach from your navel to your pubic hair.

You may get brown patches (chloasma, or the "mask of pregnancy") on your face.

Your areolas, the darker skin around your nipples, may darken.

Your feet and ankles may swell.

You may feel your uterus in your lower abdomen.

### The Third Trimester

You can feel the baby's movements strongly.

You may be short of breath.

You need to urinate more often as the baby drops and puts extra pressure on your bladder.

Colostrum—a yellow, watery pre-milk—may leak from your nipples.

Your navel may stick out.

You may have contractions (abdominal tightening or pain). These can signal false or real labor.

### Finally...

Knowing how your baby grows and develops can help you prepare for the coming weeks.

The due date helps your doctor measure the growth of the fetus and the progress of your pregnancy. If you have any questions about what is happening with your baby or your body, talk to your doctor.

### Glossary

**Fetus:** A baby growing in the woman's uterus.

**Hormones:** Substances produced by the body to control certain functions.

**Placenta:** Tissue that provides nourishment to and takes away waste from the foetus.

## **How A Baby Grows**

### **The First Month**

(1/2 inch, less than 1 ounce)

The fertilized egg attaches to the lining of the uterus. Some of these cells will grow into a baby. Other cells will form the placenta.

Arms and legs begin to form.

Brain and spinal cord begin to form.

Heart and lungs begin to develop. The heart begins to beat near the end of this month.

### **The Second Month**

(1 inch, less than 1 ounce)

Eyelids form, but remain closed.

The inner ear begins to develop.

Bones appear.

Ankles, wrists, fingers, and toes form.

The genitals begin to develop.

By the end of the month, all major organs and body systems have begun to develop.

### **The Third Month**

3 1/2 inches, just more than 1 ounce

Twenty buds for future teeth appear.

All internal parts are formed, but are not fully developed.

Fingers and toes continue to grow. Soft nails begin to form.

Bones and muscles begin to grow.

The intestines begin to form.

The backbone is soft and can flex.

The skin is almost transparent.

The hands are more developed than the feet.

The arms are longer than the legs.

### **The Fourth Month**

6–7 inches, 5 ounces

Eyebrows, eyelashes, and fingernails form.

Arms and legs can flex.

External sex organs are formed.

The skin is wrinkled and the body is covered with a waxy coating (vernix) and fine hair (lanugo).

The placenta is fully formed.

The outer ear begins to develop.

The fetus can swallow and hear.

The neck is formed.

Kidneys are functioning and begin to produce urine.



**The Fifth Month**

10 inches, 1/2–1 pound

The sucking reflex develops. If the hand floats to the mouth, the fetus may suck his or her thumb.

He or she is more active. You may be able to feel him or her move.

The fetus sleeps and wakes regularly.

Nails grow to the tips of the fingers.

Gall bladder begins producing bile, which is needed to digest nutrients.

In girls, all her eggs have formed in the ovaries.

In boys, the testicles begin to descend from the abdomen into the scrotum.

**The Sixth Month**

12 inches, 1–1 1/2 pounds

Real hair begins to grow.

The brain is rapidly developing.

The eyes begin to open.

Finger and toe prints can be seen.

The lungs are fully formed, but not yet functioning.

**The Seventh Month**

14 inches, 2–2 1/2 pounds

The eyes can open and close and sense changes in light.

Lanugo begins to disappear.

The fetus kicks and stretches.

The fetus can make grasping motions and responds to sound.

**The Eighth Month**

18 inches, 5 pounds

With its major development finished, the fetus gains weight very quickly.

Bones harden, but the skull remains soft and flexible for delivery.

The different regions of the brain are forming.

Taste buds develop and the fetus can taste sweet and sour.

The fetus may now hiccup.

**The Ninth Month**

20 inches, 6–9 pounds

The foetus usually turns into a head-down position for birth.

The skin is less wrinkled.

The lungs mature and are ready to function on their own.

Sleeping patterns develop.

The foetus will gain about 1/2 pound per week this month.


















**Conversion Chart**

1 inch = 2.54 centimeters    1 ounce = 28 grams

1 pound = 453.59 grams

The Uterus Grows With Pregnancy

# Pregnancy Stages

 <ul style="list-style-type: none"> <li>• Start of the first trimester.</li> <li>• Ovulation and conception</li> <li>• During week 4 some home pregnancy tests will detect that you have conceived.</li> <li>• The embryo is just two cells.</li> </ul> <p><b>Month 1</b></p>	 <ul style="list-style-type: none"> <li>• Signs of Pregnancy: Extreme fatigue, frequent urination, morning sickness, and hormonal fluctuations.</li> <li>• The baby's heart is beating.</li> <li>• The baby's brain is formed.</li> </ul>  <p><b>Month 2</b></p>	 <ul style="list-style-type: none"> <li>• Embryo officially becomes a fetus.</li> <li>• Decreased morning sickness.</li> <li>• Fetus is about the size of a plum.</li> </ul>  <p><b>Month 3</b></p>
 <ul style="list-style-type: none"> <li>• Start of the second trimester.</li> <li>• The baby's bones are hardening and will now show up on an x-ray.</li> <li>• The baby is about 5 inches long and weighs about 5 ounces.</li> </ul>  <p><b>Month 4</b></p>	 <ul style="list-style-type: none"> <li>• You begin to feel the baby start to kick.</li> <li>• The baby's hearing starts developing.</li> <li>• Common discomforts during this month: backaches, indigestion, heartburn, headaches, water retention, dizziness, constipation.</li> </ul>  <p><b>Month 5</b></p>	 <ul style="list-style-type: none"> <li>• This month marks the halfway mark in your pregnancy.</li> <li>• At the end of this month the baby is almost fully formed.</li> </ul>  <p><b>Month 6</b></p>
 <ul style="list-style-type: none"> <li>• Possible occurrences of Braxton Hicks contractions.</li> <li>• The baby's brain is beginning to process sights and sounds.</li> <li>• The baby is about 13 inches long.</li> </ul>  <p><b>Month 7</b></p>	 <ul style="list-style-type: none"> <li>• The baby is fully formed and putting on weight.</li> <li>• The baby's lungs are almost fully developed.</li> </ul>  <p><b>Month 8</b></p>	 <ul style="list-style-type: none"> <li>• Common discomforts: Braxton Hicks contractions, pelvic pressure, difficulty sleeping.</li> </ul>  <p><b>Month 9</b></p>

## TRIMESTER INFORMATION

### **First – 14 weeks from the 1<sup>st</sup> day of last period**

*Baby:* from egg to 3 " long, fully developed body, arms, legs, nails, ears

*Mother:* uterus grows; heartbeat heard at day 26; increase in nausea and vomiting possible; at 10 weeks relaxin begins affecting joints - minimal structural changes occur; fatigue; increased blood volume and increased heart rate; metabolic changes; increase in frequency of urination; constipation; anemia; headaches and dizziness possibly due to hormonal changes.

*Massage:* Risk of miscarriage the highest; no massage

---

### **Second: 14-28 weeks**

*Baby:* grows to 11" and 1 1/2 lbs. fingerprints, eyebrows and eyelashes form; 16 weeks sensitive to light; 24 weeks hearing develops; 29 weeks opens eyes and looks to light source.

*Mother:* Structural changes: stress on low back upper back, pectorals; rib cage flares out at base and elevates; diaphragm elevates at rib attachments; breathing is mostly costal; abdominal breathing difficult; linea alba separates; center of gravity changes to adapt to extra weight held in front.

Varicose veins and muscle cramping occur. Skin stretches. Breasts swollen and tender.

*Massage:* *Decreased* risk of miscarriage; deep tissue ok on areas of chronic stress; joints less stable due to relaxin especially SI joint, symphysis pubis and hips.

*Treatment plan:* Focus on increasing breathing capacity, releasing abdominal attachments at lower rib cage; massaging intercostals. Watch for sciatica, low back and upper back problems related with changes in center of gravity. Continue to teach relaxation and connection to breathing.

---

**Third:** 28-40 weeks

*Baby:* 14-16 " and 2 1/2 -3 lbs: at start; grows to 5-9 lbs. and 20" in length; 29 weeks lungs developed; 32 weeks brain development, eyes track movement, sleep patterns develop.

*Mother:* Shortness of breath, difficulty breathing as uterus grows to rib cage; diaphragm rises 1 1/2 " upward; Difficult to move and walk; hemorrhoids, varicose veins, heartburn, hiatal hernias, frequent urination, constipation, trouble sleeping, edema in ankles and legs, carpal tunnel, stress to heart

*Massage:* same as in 2nd trimester

*Treatment plan:* Decrease stress to postural muscles - , legs, hips, low back. Gentle massage to help oedema (fluid retention).

the school of fine tuning

## CHANGES TO SYSTEMS DURING PREGNANCY

Area of change	Changes	suggestions for massage/bodywork
Abdominal wall	<ul style="list-style-type: none"> <li>• fascia, muscle, skin stretches</li> <li>• stretch marks may appear</li> <li>• rectus abdominus under considerable strain</li> <li>• linea alba may give way ( diastasis recti)</li> <li>• abdominal contents protrude at midline</li> </ul>	<ul style="list-style-type: none"> <li>☐ cross-fiber attachments of obliques along rib cage to relieve tension</li> <li>☐ avoid direct abdominal work</li> </ul>
Breasts	<ul style="list-style-type: none"> <li>☐ enlarged and sensitive by the 8th week</li> <li>☐ increased vascular supply</li> <li>☐ 5th month preparation for lactation</li> <li>☐ stretch marks</li> <li>☐ chloasma around nipples and areola</li> </ul>	N/A
Skin	<ul style="list-style-type: none"> <li>☐ drier or oilier</li> <li>☐ acne</li> <li>☐ stretch marks</li> <li>☐ linea nigra -brownish streak down mid-line of abdomen</li> <li>☐ chloasma (mask of pregnancy) around eyes and in labia majora/minora</li> </ul>	<ul style="list-style-type: none"> <li>☐ Mother to apply cocoa butter</li> </ul>
Pelvic floor	<ul style="list-style-type: none"> <li>☐ stretches in preparation for labor</li> <li>☐ stretches due to extra weight of baby</li> </ul>	<ul style="list-style-type: none"> <li>☐ kegel exercises for strengthening</li> </ul>
Circulatory system	<ul style="list-style-type: none"> <li>☐ heart size increases and moves anteriorly (upward and to the left)</li> <li>☐ expansion of vascular channels</li> <li>☐ blood volume increases 30-50%</li> <li>☐ increase in red and white blood cells</li> <li>☐ interstitial fluid volume increases 40% in 3rd trimester causing edema in legs</li> <li>☐ femoral venous ( saphenous, iliac, femoral, parametrial) pressure increases due to pressure of enlarging fetus on pelvic veins causes varicose veins and</li> </ul>	<ul style="list-style-type: none"> <li>☐ Women with underlying heart disease at greatest risk for heart failure in 3rd trimester.</li> <li>☐ Use caution when working on legs as an increase in blood clots can occur.</li> <li>☐ Use side lying position</li> </ul>

	edema	
Respiratory	<ul style="list-style-type: none"> <li>☐ increased breathing rate-possibly hyperventilation</li> <li>☐ lower rib cage flares out and diaphragm elevates to make room for the baby</li> <li>☐ accessory muscles used for breathing (scalenes, external intercostals, pec minor)</li> </ul>	<ul style="list-style-type: none"> <li>☐ Teach breathing</li> <li>☐ release intercostals, pec minor</li> <li>☐ release all rib cage areas</li> </ul>
Gastrointestinal and Urinary	<ul style="list-style-type: none"> <li>☐ saliva becomes more acidic increasing tooth decay</li> <li>☐ excessive gum bleeding</li> <li>☐ gastric acidity and vomiting in 1st trimester</li> <li>☐ peristaltic activity and muscle tone of colon decreased causing constipation</li> <li>☐ increased pressure on sigmoid colon causes constipation</li> <li>☐ 20th week: stomach pushed upward into left dome of diaphragm may cause hiatal hernia</li> <li>☐ gall bladder emptying increases</li> <li>☐ urinary infections common</li> <li>☐ bladder capacity decreases as uterus enlarges</li> </ul>	<ul style="list-style-type: none"> <li>☐ Work with reflexology to stimulate digestion</li> <li>☐ Have mother urinate before session whether she needs to or not. Be prepared for her to get up and go during session.</li> </ul>
Musculoskeletal	<ul style="list-style-type: none"> <li>☐ 10 weeks -hormone relaxing produced relaxing the ligaments in SI joint and symphysis pubis; also affects other ligaments</li> <li>☐ general decrease in myofascial pain</li> <li>☐ weight bearing joints placed under more stress due to weight gain and postural changes</li> <li>☐ weight gain in front of body causes woman to lean back changing the center of gravity allowing the pelvis to rotate forward, placing more stress on the SI joint, lumbar spine and stretches abdominals</li> <li>☐ other muscles stressed; pectoral, abdominals, QL, pelvic floor, erector spinae, iliopsoas</li> </ul>	<ul style="list-style-type: none"> <li>☐ Increase their awareness of the connection between breath and relaxation</li> <li>☐ check position of tailbone</li> </ul>

Endocrine	<ul style="list-style-type: none"> <li>☐ increase in size and output of pituitary, thyroid, parathyroid, adrenal glands</li> <li>☐ estrogen targets thighs, buttocks, hips to store extra fat</li> <li>☐ estrogen increases size of uterus, cervix, genitals, breasts</li> <li>☐ estrogen decreases stomach acid which can lead to heart burn and indigestion</li> <li>☐ progesterone relaxes smooth muscle and dilates peripheral blood vessels, leading to decrease in peristaltic activity, urinary bladder dysfunction, hemorrhoids, varicose veins and edema.</li> </ul>	<ul style="list-style-type: none"> <li>☐ do not do any reflexive work that stimulates endocrine points</li> </ul>
-----------	---	---

the school of fine tuning

## Hormones

During a typical menstrual cycle the corpus luteum (lining of the womb) degenerates about 2 weeks after ovulation. This causes the levels of oestrogen and progesterone to decline rapidly and the lining of the uterus not maintained, resulting in menstrual flow. If this occurs after implantation the embryo becomes spontaneously aborted – miscarried.

Human Chronic Gonadotrophic Hormone (HCG) is secreted by a layer of embryonic cells that surround the developing embryo. This helps to stop a miscarriage from occurring and maintains the corpus luteum in order to establish pregnancy.

The maintenance of the corpus luteum is important for the first trimester. After this time the placenta is usually well developed and is able to secrete sufficient oestrogen and progesterone. Oestrogen and progesterone are the female sex hormones. Oestrogen is produced by the ovaries.

### **Progesterone & Oestrogen**

- Prepare the uterus for pregnancy and the mammary glands for lactation (breast milk). The placenta continues to secrete the hormones to help maintain the pregnancy.
- Maintain the uterine wall
- Enlarges internal structures to allow for the pregnancy, accommodating the foetus
- Promote blood flow to foetus bringing nutrients and oxygen
- Inhibit the secretion of gonadotrophic hormones FSH (Follicle Stimulating Hormone) and LH (Lietzig Hormone)
- Stimulates the development of the mammary glands
- Inhibit uterine contractions until birth
- Cause an enlargement of the reproductive organs

The ovaries and placenta produce inhibin . Inhibin is the hormone that inhibits secretion of FSH. This prevents other ova (eggs) being produced during pregnancy.

At the end of the gestation period, levels of progesterone fall. Labour cannot begin until the levels of progesterone fall, as it inhibits uterine contractions.

Oxytocyn stimulates uterine contractions and the ovaries and placenta secrete relaxin. Relaxin is the hormone produced by ovaries and placenta during pregnancy, it helps to dilate the cervix and increase flexibility of the pelvic bone during childbirth.



Hormones are chemically diverse substances which are released into the bloodstream in response to stimulus, and activate cells, depending on the hormone in question. The main hormones involved in pregnancy and their functions are listed below.

**Human Chorionic Gonadotropin (hCG)** stimulates the production of oestrogen and progesterone within the ovary, also responsible for gonad development in the foetus. It is released very early in pregnancy and isn't present at any other time – it drops dramatically in the 2<sup>nd</sup> Trimester. This is the hormone which pregnancy tests look for. Production of this hormone diminishes once the placenta is mature enough to take over oestrogen and progesterone production.

**Oestrogen** this hormone causes the breast tenderness and enlargement which are typical of early pregnancy. Oestrogen also regulates the secretion of progesterone along with other hormones. It plays an important role in the development of the foetus, with various organs and systems in the foetus being triggered into development by oestrogen. It also regulates the bone density in the foetus. It is produced throughout pregnancy and helps to prepare the womb for the baby and the breasts for feeding.

**Progesterone** Prevents the womb from **spontaneously aborting** the foetus by building up the lining so that it can support the placenta. As long as progesterone levels are high, menstruation does not occur, and hence it is this hormone during pregnancy that prevents menstruation and any further eggs from being released. This hormone stimulates the growth of the mammary gland, while preventing lactation until birth, It also makes the pelvic wall stronger for labour and prevents the uterus from contracting until the baby is fully developed. Drops dramatically after pregnancy. Also responsible for the lack of interest in sex during pregnancy.

**Prolactin** is produced by the pituitary gland. It is responsible for the increase in cells which produce milk within the breasts. Progesterone and Oestrogen actually prevent milk from being produced, however, immediately after birth the levels of these hormones drop dramatically, allowing prolactin to stimulate the initial production of milk. Suckling also controls milk production. Prolactin also prevents a nursing mother from falling pregnant, but cannot be relied on as the only form of contraception.

**Relaxin** is found early in pregnancy and is responsible for helping limit the activity of the womb and soften the cervix in preparation for delivery. Also softens ligaments and connective tissue in preparation for the structural changes in pregnancy and during the birth. Present from the 1<sup>st</sup> month until approximately 6 months after delivery.

**Oxytocin** is involved in reproductive behaviour in both men and women and, apparently, triggers “caring” behaviour. It is also the hormone which allows contractions of the womb during pregnancy and labour. Contractions felt during breast feeding are also due to oxytocin. Also used to induce labour.

## What is pregnancy Massage

Pregnancy massage may also be known as prenatal or antenatal massage. When the client is pregnant we alter the standard body massage treatment, allowing for the body changes, therefore knowledge of the changes in the body during pregnancy are important, and hence the name of the massage is known as 'pregnancy or prenatal/ antenatal massage'.

A pregnancy massage may last for an hour (full body) or 25 minutes (back, neck & shoulders). Remember to allow time for consultation. You don't need any special equipment to carry out a pregnancy massage, but you will need to ensure that your client is comfortable and supported throughout the treatment to avoid any risk of injury. After 20 weeks of pregnancy the client should not lay on her back, and must be positioned comfortably on her side.

The setting of the room should be the same as for a standard massage treatment, but take into consideration that strong smells may be unpleasant for the client during her pregnancy.

### **Is Massage safe during pregnancy?**

If carried out safely and correctly, massage during pregnancy can be very beneficial for both the mum and the unborn baby.

- Pregnant women's bodies are working hard, and so they will tire more easily than usual. Massage will help to sooth and relax the body.
- During pregnancy the muscles in the pelvis and lower back soften and change shape, which alters the posture. This can cause stress on the lower back and legs. As weight gain increases this also causes the legs and feet to get very tired.
- Sleep can be difficult during pregnancy due to the hormones and also discomfort of being heavily pregnant. A relaxing massage can help with insomnia, and aid a restful night's sleep.

Precautions must always be taken during pregnancy, and although there is no direct link between pregnancy massage and miscarriage it is not advised to give massage during the first 12 weeks of pregnancy due to the potential high risk of miscarriage at this time. After the first trimester, massage is fine to carry out, but it is advised that you obtain consent from the client's doctor or midwife prior to the treatment. It is important to check with your insurance company, and ask their particular requirements.

**The massage techniques will need to be adapted to make it suitable for the client.**

- No percussion or tapotement to be carried out
- Use only smooth and gentle effleurage movements
- Remember to alter the position of your client, your client cannot lay on her stomach, and after 20 weeks, must not lay flat on her back so the couch should be semi reclined, or you should position your client onto her side (in the recovery position)
- Remember to provide lots of towels for support under the back and knees.
- The stomach/abdomen must not be massaged.

### **How to Perform Safe and Effective Pregnancy Massage**

Massaging a woman during her pregnancy is an excellent way to keep a mum-to-be comfortable and relaxed as her growing body accommodates the new weight and postural distortions that pregnancy brings. A more relaxed approach towards giving birth has better birth outcomes and there is better bonding with mother and baby, as well as improved chances of carrying the baby to full term.

Extras you will need for the massage:-

A firm, steady, thick pillow for the leg

A thin cushion or folded towel for under the belly.

A pillow to hold onto

Two large towels for body and legs, and a smaller one to drape across breasts.

Positioning:-

**NEVER EVER** allow a pregnant woman to lie on her stomach. The weight of the uterus will pull the ligaments on the mother's sacrum (the lower back) and cause backache; obviously that is the reverse of the objective. Also, do not massage any woman in their first trimester (less than 12 weeks), due to the increased risk of miscarriage. There is nothing you can do to cause a miscarriage, but a woman who has lost a baby following a massage, is far more likely to look for reasons and accuse, or even possibly sue, so for insurance sake and good relations, massage from the second trimester only.

Also, do not lay a pregnant woman on her back. The weight of the uterus is too much pressure for the vena cava (main vein running up the right side of the spine) and will cause breathlessness in the mother and restrict oxygen and nutrients to the baby. The safest position

is in the side lying position, working one side at a time and asking her to turn over half way through, so you can massage both sides effectively.

When lying on her side, the pregnant woman should have her knee and foot on a firm and steady pillow that is high enough for her hip to be at a right angle so her leg is not pulling on her hip and lower back. Ensure that the foot is supported, as this creates more comfort for the mother.

If her belly feels like it is “pulling” while lying on her side, the mum-to-be will need a small cushion or towel under her belly. Allow her to put the cushion there, so she can make herself comfortable. Any woman who is 22 weeks or more into the pregnancy will need the belly cushion, even if they initially feel comfortable...after 1 hour of lying on the couch can be difficult at this stage.

Ask your pregnant lady to lie on the couch, but to shuffle over so that her back is as close to the edge as possible....this makes it far more comfortable so you don't have to over-reach o massage her and end up with backache yourself. Also make sure that the pillows under her legs are close enough to her, so that her back and hips are not twisting.

Once you have made sure her leg is comfortable and the towels are in place, it's a nice idea to give her a pillow to hold onto, or hug towards her, so that she does not put any pressure on her breasts, which can be very tender.

You will need two towels to drape across your mum-to-be. Make sure one towel covers the legs and is tucked into her underwear, but pulled down slightly so that you can work into the lower spine. Cover the front and back of your client with another towel, and ask her to place a folded hand towel across her breasts, so that when you expose her back, her breasts are covered. Also, as pregnant ladies tend to get overheated, it may well be that she asks you to remove the towel covering her front and back. Make sure your client has a pillow under her head that is not too high or low...her neck should be in line with their spine. If the pillow is too low, she is likely to place a hand under her head, so you will know if extra support is needed. All of this must be carried out with her on her side.

#### PRESSURE:-

You can use as much pressure as you client would like, when working on her back. The lower back, in particular the sacrum is often very sore and stiff because of postural distortions, so working as strong as the client likes is good to help release tight muscles. The shoulders and neck too are also sore spots for pregnant women and can be massaged as light or strong as your client feels comfortable with. However, bear in mind this is a massage to relax her too, so no elbow, knuckles or very deep work.

The only place on a pregnant body that you must NOT UNDER ANY CIRCUMSTANCES massage is the inside of the legs. A pregnant woman has 40% more blood in her body, which is thicker and prone to clotting – this is the body's great design feature and coping mechanism for giving birth in case of haemorrhaging. Normally the clots will disintegrate naturally, but if you use pressure on the inner thigh and calves, or any shaking/percussion movements on the leg, you may accidentally move a clot which could cause thrombosis – an extremely dangerous restriction on blood flow – and cause serious problems for mother and baby.

### **ACUPRESSURE POINTS TO AVOID**

#### **ANKLES**

Massage therapy and acupressure--manipulating the muscles and pressure points throughout the body--are two alternative therapies that can help alleviate muscle and nerve pain during pregnancy, and can be very relaxing. Certain pressure points, however, should be avoided during pregnancy to reduce the risk of harm to the unborn baby or provoke contractions before an expectant mum's due date.

Pressure points near the ankle are contraindicated during pregnancy, because, when manipulated, they can cause the pelvic muscles and uterus to contract. Contractions well before a woman's due date can lead to preterm labour, which is not safe for the child.

The Acupuncture Referral Service describes the prohibited spot on the ankle is the Sanyinjiao or Sp6, which is located three fingers' width above the inner ankle bone, called the medial malleolus.

#### **HANDS**

There are two points on the hands that should not be touched during a massage or acupressure session when a woman is pregnant. The first point is called the Hegu or Hoku, Union Valley or LI4 and is the fleshy spot between a person's thumb and forefinger. The Hegu point could cause contractions in a pregnant woman if massaged or manipulated. The other point to avoid in the hand is in the wrist. Manipulating pressure points in the wrist may cause uterine contractions that are unsafe in early stages of pregnancy.

#### **REFLEXOLOGY**

You can safely massage a pregnant woman's feet with as much pressure as she is comfortable with. Massaging the feet has a different intention and effect than reflexology, so is not dangerous to mother or baby. Reflexology can safely be given to a pregnant woman from 13 weeks onwards, so long as you stay away from the reproductive area and the pituitary gland as both of these can stimulate a miscarriage or premature labour.

If your client has water retention, or puffy hands and/or feet, make sure you use very light pressure on these areas. Some women really like their belly to be massaged when they are pregnant, while others absolutely hate it. You must, therefore, ask the mother before commencing the massage if she would like her belly touched. If she does, only use the flat of your hand with very gentle pressure, no pushing or poking with fingers.

So, just to recap –

Always ask the client to tell you if there are any sore or painful spots and discuss the pressure she would like – never make the massage so strong that it's painful. The baby gets the same as mum, so, if she is in pain, so will the baby be also.

No massage before the first trimester (around 12-13 weeks)

No massaging the inner thigh

No shaking or percussion moves on the legs

No massage for anyone who is bleeding

Always, always check that there have been no complications before commencing.

the school of fine tuning

## **BACKACHE IN PREGNANCY**

Why does pregnancy cause low back pain?

The answer is twofold. Firstly, as the foetus grows, the abdominal wall stretches to accommodate the expanding womb and the extra room for this has to come from somewhere. Because the abdominal muscles are stretched far beyond their normal state during pregnancy, they lose their ability to perform their normal role in maintaining body posture and, as a result, the lower back takes on an abnormal amount of weight from the torso.

The hormone RELAXIN is the second explanation for back pain. During pregnancy this hormone is present in 10 times its normal concentration in the female body. Relaxin is good in the sense that its function is to relax the joints in the pelvis so the baby can pass through the birth canal. However, unfortunately, relaxin causes abnormal motion in other joints of the body causing inflammation and pain

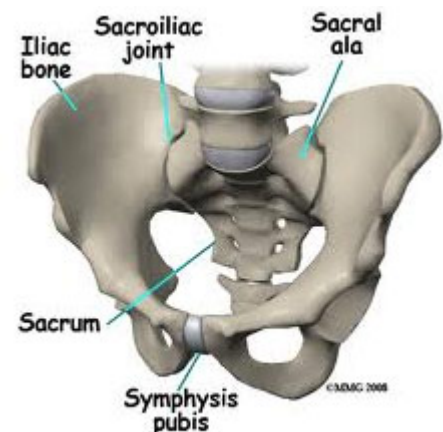
## **Pelvic girdle pain and Symphysis Pubis Instability (SPD)**

**What is it?**

Essentially what it says: pain in the pelvic area.

In every pregnancy there is a natural increase in the mobility of the pelvis due to the softness of tissue under the influence of pregnancy hormones. This helps create space for your baby. As your baby puts on weight your pelvis has to work harder. The main joints of the pelvis are the sacro iliac (the two bones at the base of your spine and the. symphysis pubis - pubic bone joint - right in the middle at the front.

For many women, these changes do not cause any discomfort, for others they can experience extreme discomfort which may even begin in the first trimester, as



already hormonal changes begin or it could be that they have a weaker pelvis caused by a previous pregnancy or birth.

### **What are the symptoms?**

The symptoms are a pain which can be on-going or sudden and felt in the pubis, groin, inside of thighs, either on one side or both. It is frequently accompanied by low back, sacro iliac and pain just above the pubic bone which can be mild or severe. Of course, there are many other things which can cause these symptoms e.g. repetitive kicking from your baby in the womb, stretching of the uterine ligaments. What often helps identify the pelvic girdle weakness is that there is often a more specific symphysis pubis pain or pain in the sacro iliac which has a burning sensation.

### **What can make it worse?**

What makes it worse are any activities or movements which involve opening the hips i.e. turning from side to side in bed at night, breast stroke swimming (legs), squatting. Walking and all weight bearing activities can aggravate it. The problem is that in its early stages the pain may not be felt while doing these activities, only several hours later so the connection is not always made. Symphyseal "clicking" or grinding may be audible and can be felt by the woman. There is a characteristic waddling gait. Some people confuse it with urinary tract infections because of the burning pain, but with UTI's the pain is more internal.

It can come on gradually in pregnancy, usually in the last trimester with a first pregnancy. It can appear from 20 weeks and usually starts early in a second or subsequent pregnancy. It can be caused by labour usually by being in stirrups for extended periods.

### **What is it caused by?**

The numbers of women experiencing this problem are growing. I think that it is caused by modern lifestyles which mean we are sat down at desks a lot more, driving around rather than walking. This means that our muscles are less toned/strong and therefore support the whole pelvic girdle less effectively during pregnancy. I also feel that there is a stress link. Women who are working outside the home during pregnancy are not always able to rest as much as they need to and the body copes less well with the physical demands of the pregnancy.

The other group of women who tend to suffer are those who did excessive amounts of hip opening exercises while young e.g. gymnasts or ballerinas. Women who have suffered from any kind of pelvic injury are also more likely to suffer as in these cases there is usually a slight displacement of the pelvis which means that the symphysis pubis is placed under an unequal stress on one side.



## **What should I do?**

If you suspect that you have any of the symptoms, then avoid, as much as possible, for one week any movements where you part your legs. If turning in bed at night try and keep your knees together as much as you can. It is best if you can to turn over by rolling into all fours and then lying on the other side. Try to minimise for this week the amount of walking and lifting that you do. If you notice a difference, then the chances are you have symphysis pubis diastasis and then continue in this way. You need to find the pain free gap. For some women this means pretty much keeping your legs together most of the time, especially when changing position. For others, the legs can be a little apart, however not more than hip width. If you notice no difference, then it is probably something else.

As it is caused either by lack of exercise or excessive exercise, then correct exercise is important. Do some back and abdominal strengthening exercises, to give support to the pelvis. You must make sure you are only doing movements which don't involve moving your hips apart and where your knees are close together. A good exercise is the yoga cat stretch.

As stress is also a factor, having some form of bodywork which can relax you, as well as addressing the physical problems is extremely helpful. You may also like to try massage or acupuncture. The therapist can include techniques which specifically support this condition by strengthening the area of weakness, structurally and emotionally.

If you do need to walk distances or have a toddler you can't avoid picking up much, then you can ask your midwife to refer you to an obstetric physiotherapist who can prescribe a kind of tubigrip support belt which helps hold the pubic joint together. If you do get this, you must still follow all the above advice.

If you follow all this, the chances of having a relatively pain free pregnancy are high. You cannot "cure" it, as the amount of relaxin increases until the end of pregnancy and your baby is getting heavier, but you can learn to be relatively pain free.

## **Labour**

You can have a vaginal delivery but you must make sure that you labour and ideally deliver if possible in the all fours position, keeping your knees as close together as you can. Avoid stirrups if at all possible. Often being in water is helpful as it gives support to your joints, but obviously you need to be careful how you get in and out of the pool. Discuss it with your midwife. Otherwise you can aggravate the problem and so it remains a problem postnatally.

## **Postnatally**

If you have followed all the above advice in pregnancy and labour, you may well find that as soon as you have delivered there is no pain. You still need to be careful to avoid leg abduction movements for 4-6 weeks postnatally and then resume them gradually. In the first 4-6 weeks follow a gentle back/abdominal/pelvic floor strengthening programme. If you can, continue to have some shiatsu or massage from a trained specialist in maternity skills.

*Copyright © Well Mother 1990-2011.*

the school of fine tuning

the school of fine tuning

## Consultation & Preparation

### Have you obtained consent from the Doctor or Midwife?

Before beginning any treatment a full consultation should be carried out to ensure the suitability of the client for the treatment they are about to receive. \*See attached example

Client consultation forms have two purposes:

1. They provide a written guide to the clients details and lifestyle
2. They provide a written record of what service you provided for the client

This information is useful so that you can see at the next appointment what you did, and what you need to do next. It also provides a written record of what has been done if a client has a complaint or problem.

#### **What information is required?**

Name – For filing purposes and so you know who you are treating

Address – So that you can write to the client if necessary

Telephone number – In case you need to contact the client

Occupation – So that you can help choose a suitable treatment for their lifestyle

Medication – In case this affects the treatment / contra indicates

Medical History – Some illnesses mean that the client cannot have the treatment, or that you should take extra care when performing the treatment

Pregnancy – To allow for any alteration in the treatment

## Massage Techniques

Once your client is comfortable on her side, start by exposing the side of the back you are working on and oil the whole of the back.

**BE AWARE** – Check that the oil is suitable and unscented, unless you are qualified in Aromatherapy.

**BE AWARE** – your posture, it is not a position you would normally massage in, so please be aware of your own posture.

**BE AWARE** – of the acupressure points that must be avoided. Before beginning your massage, ensure that your client is comfortable and suitably un-clothed. I always begin by asking my client to take a deep breath in, then to release the breath slowly. When they release, start your routine.

### **Effleurage**

Begin – Link – End

An introductory and linking movement of gentle to firm stroking. Using flat palms of hands with fingers together. A light pressure is applied, keeping contact with the skin, and always working towards the heart.

- Introduces massage, links movements, and ends massage
- Promotes relaxation
- Increases circulation and lymphatic flow

### **Petrissage**

Compression

Compressions, including kneading and lifting using the palms of the hands, work in small circular motions, lifting the muscle from the bone. Using forefinger and thumbs begin to knead as if kneading dough, working towards the heart. Lastly wringing, use both hands flat to wring the muscle lifting and releasing.

- Works deeper to relax muscle
- Improved circulation and lymphatic drainage
- Warms muscles

### **Frictions**

Causing Heat

Small deep movements using palms, fingers or thumbs. Deep pressures in small circular motions.

- Increases local circulation
- Relaxes muscle

### **Vibrations**

Stimulating Nerves

Rapid contractions provided by the contraction of the therapists muscles, creating a mild shake.

- Stimulating local nerve endings

the school of fine tuning

## **Massage Mediums**

### **Oils**

Almond, Peach Kernal, Grapeseed, Mineral and many more

Oils provide an excellent lubrication for massage treatments allowing pressure to be applied, as well as ensuring that friction is adequate and not uncomfortable. There are several types of oil available, and the choice is really down to your preference, or the clients if you wish to give them that option. Some of the oils differ nutritionally so bear these properties in mind when recommending oils for your client.

### **Creams**

Scented or unscented

Creams can be used if you prefer, or if oil is an irritant to your client's skin. They can also be used as part of a specific treatment to benefit your client, i.e. toning cream, stretch mark cream.

### **Balms**

Usually made with natural products such as bee's wax

Balms are generally used for firmer massage using deeper manipulations due to the increased friction (less slide).

### **Powders**

Calendula Powder (preffered), Talc

Not to be used with asthmatic clients. Sometimes useful on male clients, i.e. hairy area's such as the legs.

### **Benefits Of Massage**

- Improves Circulation
- Improves Waste Removal / Lymphatic Drainage
- Soothes or Stimulates Nervous System
- Relaxes Digestive System, relieving Constipation
- Relieves muscular tension
- Tones Muscles
- Softens and Nourishes Skin (Mildly Desquamates)
- Relaxes mind
- Triggers release of serotonin and endorphins
- Reduce anxiety/stress
- Decrease back and leg pain
- Relief from muscular cramps
- Improves sleep
- Enhance pliability of skin and underlying tissues
- Reduce swelling
- Improve outcome of Labour

### **Aftercare Advice**

Your client should be very relaxed following their treatment so maintain this by advising the client to take it easy and relax for rest of the day and avoid stimulants such as caffeine and alcohol.

Heat treatments such as sun beds, Jacuzzi's and Sauna's should be avoided as the blood pressure may have been lowered and these could cause dizziness or fainting. Sunbathing and sun beds should be avoided as the oil on the skin could cause irritation or sunburn.

Regular treatments would be advised to maintain the benefits of the pregnancy massage treatment. Every 3 to 4 weeks and then weekly towards the end of the pregnancy. Advise your client to drink plenty of water to re-hydrate and aid the removal of toxins from the body, and avoid heavy meals which may cause heart burn.



## **Massage Routine**

Always working towards the heart...

Before beginning, spritz and wipe feet with anti bacterial foot cleanser

### **Back, Neck & Shoulders**

**Back of left leg**

**Back of right leg**

**\*Re position Client\***

**Front of left leg**

**Front of right leg**

**Left foot**

**Right foot**

**Left arm and hand**

**Right arm and hand**

**Chest and neck**

**Face**

**Scalp**

the school of fine tuning

## Full Pregnancy Massage Routine

### Back

- 6 x Effleurage
- 6 x Butterfly Effleurage
  - 4 x figure of 8's
  - 4 x picking up
  - 6 x kneading
- Lifting either side
  - 2 x Wringing
- 6 x Stroking side of neck
  - 6 x Effleurage
- Thumb frictions around scapula
- Thumb frictions lumbar spine/pelvis
- Thumb frictions up spine – either side
  - 6 x Effleurage
  - Hold lower back

### Back of Legs

- 6 x Effleurage
- 4 x picking up
- 6 x kneading
- 4 x wringing
- 6 x stocking seam to calf
  - 6 x Effleurage

### Front of Legs

- 6 x Effleurage
- 4 x Picking Up
- 6 x Kneading
- 4 x Wringing
- Thumb frictions around knee (patella)
  - 6 x Effleurage

### Feet

- 6 x Effleurage
- 4 x circles on tarsals
- 4 x stroke in between tarsals
- 4 x scissors around ankle
  - Palm medial arch
    - 6 x Effleurage
    - Whip toes
- Thumb frictions on soles
  - 6 x Effleurage

### Arms & Hands

- 6 x Effleurage
- 4 x Picking up
- 6 x kneading
- 4 x Wringing
- 6 x Effleurage
- Effleurage metacarpals
- Small thumb frictions
- Effleurage fingers
  - Knead Palm
- 6 x Effleurage whole arm

### Chest & Neck

- 6 x Swimming Effleurage
- 6 x alternate effleurage
  - 3 x Side lifts
- 2 x gentle Knuckling chest, shoulders & neck
  - 6 x Swimming Effleurage

### Face & Scalp

- 6 x Effleurage
- 6 x Praying forehead
- 4 x Stroking each cheek
  - 4 x Eye Circles
- 4 x Effleurage Scalp
  - Shampooing
  - Effleurage
  - Hold Temples

the school of fine tuning

## **Practical Assessment**

To pass your assessment you must show that you can:

- Set up and prepare for a treatment
  - Carry out a consultation
- Correctly advise your client on how to lay, and what items of clothing to remove
  - Perform the full body massage routine
    - Give aftercare advice

## **Recommended Reading**

We strongly recommend reading the following books to underpin and strengthen your knowledge of this subject.

**S/NVQ Level 2 Beauty Therapy, 2<sup>nd</sup> Edition by Jane Hiscock & Frances Lovett**

ISBN: 9780435451028

**S/NVQ Level 3 Beauty Therapy, 2<sup>nd</sup> Edition by Jane Hiscock, Elaine Stoddart & Jeanine Connor**

ISBN: 9780435456405

**Body Massage Therapy Basics by Hodder & Stoughton**

ISBN:0340658266

### Assessment

- Q1. Name 2 contra indications that would prevent a client from receiving a pregnancy massage treatment (2)
- Q2. Name 2 contra indications that would cause you to adapt your pregnancy massage treatment (2)
- Q3. In what direction should massage movements be carried out? (1)
- Q4. Name 2 types of massage oil suitable for pregnancy massage (3)
- Q5. Name and describe 3 types of massage movement (6)
- Q6. Which massage movements should be avoided during pregnancy massage? (2)
- Q7. List 3 possible contra actions (3)
- Q8. List 3 benefits of pregnancy massage (3)
- Q9. What must you gain from your client before carrying out a pregnancy massage treatment? (1)
- Q10. Name the two hormones that prepare the uterus for pregnancy? (2)

the school of fine tuning