

## Pregnancy Facts

### Cardiovascular System

#### Facts:

- The heart rate increase by around 7 beats per minute for the 1<sup>st</sup> trimester and later on by as much as 15 beats per minute, with cardiac output peaking at the end of the 2<sup>nd</sup> trimester
- Hyperthermia or overheating becomes more possible as the metabolic rate has risen & maternal core temperature is higher
- The volume of plasma and blood increases by around 50% to ensure there is enough blood available during childbirth: this hemodilution can lead to anemia as there are fewer red blood cells available and also makes pregnant ladies more liable to swelling (oedema)
- The blood pressure falls during the second trimester as progesterone relaxes the walls of the blood vessels
- As the venous return becomes less effective it can be problematic to place the weight of the body upon legs, the development of varicose veins is possible
- During pregnancy generally slower to respond to need for changes in blood pressure
- At approximately 16 weeks the uterus may compress the Inferior vena cavae when lying supine, reducing the venous return and inhibiting oxygen to the baby; around 10% of women suffer from supine hypotension syndrome
- Even at 18 weeks there may be dizziness when supine
- Pregnancy hypertension is also possible

### Lymphatic System

#### Facts:

- There is an increased workload due to the greater volume of plasma and blood
- The venous return is slowed, especially in the lower limbs often leading to oedema in the later stages of pregnancy

### Respiratory System

#### Facts:

- As the baby increases in size the diaphragm cannot lower as previously due to the increased pressure from the uterus below meaning it takes more energy to inhale the same amount of air.
- There are therefore increased resting oxygen requirements & as pregnancy continues there is less oxygen available for exercise
- This means it is possible for pregnant women to easily become breathless

### Musculoskeletal System

#### Facts:

- Progesterone relaxes smooth muscle in the body
- Relaxin & Progesterone relax the cartilage and connective tissues of many joints to enable the eventual enlarging of the birth passage

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<b>Digestive System</b> <b>Facts:</b> <ul style="list-style-type: none"> <li>As the axis of the stomach is changed as the baby grows intra-abdominal pressure increases</li> <li>Gastric emptying is reduced, digestion is slowed</li> <li>As fluid volume increases the gastric PH becomes more acid</li> <li>The lower esophageal sphincter is more relaxed and gastric reflux and heartburn is common</li> </ul>	<b>Renal System</b> <b>Facts:</b> <ul style="list-style-type: none"> <li>Glomerular filtration rate increases in the first trimester increasing micturition (urination)</li> <li>Cortisol from the adrenals increase from the second trimester as it is involved in many of the metabolic processes and more is required during the extra workload during pregnancy</li> </ul>
<b>Nervous System</b> <b>Facts:</b> <ul style="list-style-type: none"> <li>This is affected by the pregnancy hormones</li> <li>The median nerves of the wrists can become compressed by edema in the later stages leading to tingling of fingers and hands, especially in early morning</li> </ul>	<b>Endocrine System</b> <b>Facts:</b> <ul style="list-style-type: none"> <li>The changes which must occur in the placenta create the majority of hormonal changes</li> <li>Progesterone is said to have a sedative effect and can alter sleep patterns, also relaxes smooth muscles</li> </ul>
<b>Other senses</b> <b>Facts:</b> <ul style="list-style-type: none"> <li>There may be visual disturbances due to corneal oedema, but diabetes and pregnancy hypertension must be excluded first</li> <li>Smell may be affected as a result of mild vascular congestion in the nasal passages</li> </ul>	<b>Integumentary System (skin)</b> <ul style="list-style-type: none"> <li>Increased pigmentation common</li> <li>May be itching upon skin</li> <li>Can be increased oil due to overactive sebaceous glands</li> </ul>
<b>Psychological</b> <ul style="list-style-type: none"> <li>Fear of dealing with the unknown</li> <li>Little control over physical changes</li> <li>Anxiety over new responsibilities</li> <li>Altered body image</li> <li>Lacking confidence in body's abilities.....</li> </ul>	