



# PREGNANCY

It is important that women who are or might become pregnant pay attention to their nutrition both before and during pregnancy. International organisations advise that poor diets that lack key nutrients like iodine, iron, folate, calcium and zinc can cause problems including:

**ANAEMIA**

**PRE-ECLAMPSIA**

**HAEMORRHAGE & MATERNAL DEATH**

**STILLBIRTH**

**LOW BIRTH WEIGHT**

**WASTING & DEVELOPMENTAL DELAYS IN BABIES**

There is also thought to be a link between diseases in the next generation and the health of the mother before and during pregnancy.

However, it is the quality of the mother's diet that matters rather than the quantity. For most women, there is no need to increase nutritional quantity until the third trimester – probably by about 450 calories a day.

Orange Dairy recognises that breastmilk provides balanced nutrition and protection, making it the best food for babies. But when families and healthcare providers decide that it is not possible to breastfeed, infant formula plays an important role in providing essential nutrients and is the only breastmilk substitute recognised by the World Health Organization.

## MUST-HAVE NUTRIENTS

There are a number of nutrients that it is particularly important for pregnant women to have.

### FOLIC ACID

This is important for cell division and women who may become pregnant should take 400mg per day from several months before becoming pregnant till the 12th week of pregnancy. Further folic acid should be provided from diet. Folic acid can help prevent neural tube defects such as spina bifida. If needed, higher strength folic acid can be prescribed by a doctor. Dietary sources include green leafy vegetables (they contain folate, the natural form of folic acid) and breakfast cereals and fat spreads that have had folic acid added.

### IRON

Iron deficiency is a common problem and if ferritin or Hb levels are low, an iron supplement should be taken. Pregnant women should eat iron-rich foods together with those that are rich in vitamin C as this aids iron absorption. Foods from which iron is most easily absorbed include lean meat, green leafy vegetables, dried fruit and nuts.

### OMEGA 3A & 6 FATS

These fats must be provided by diet as they are not easily made by the body. They are vital for the development of baby's brain and can be found in oily fish like trout, pilchards, kippers, mackerel, sardines and tuna.

### CALCIUM

Calcium is vital for making baby's bones and teeth. Sources of calcium include milk, cheese and yoghurt, green leafy vegetable such as rocket, watercress or curly kale, tofu, soya drinks with added calcium, bread and any foods made with fortified flour, and fish where you eat the bones, such as sardines and pilchards.

### VITAMIN C

Vitamin C protects cells and keeps them healthy. It is found in a wide variety of fruit and vegetables and a balanced diet can provide all the vitamin C that is needed. Good sources include oranges and orange juice, red and green peppers, strawberries, blackcurrants, broccoli, brussels sprouts and potatoes.

### VITAMIN D

Pregnant women should take a daily supplement of 10mg. Sunlight helps the body make vitamin D, but good dietary sources include oily fish (such as salmon, mackerel, herring and sardines), eggs and red meat.

## HEALTHY EATING

Expectant mothers should aim to eat a balanced diet, but the following foods can help provide nutrition during pregnancy:

- ✔ Oily fish such as salmon, fresh tuna or sardines have most of the omega 3 LCP fatty acids that baby needs for developing eyes and brain. Also contains vitamin A & D and iodine.
- ✔ Green vegetables like broccoli, peas, spring greens, and spinach contain folate to help baby's development plus other vitamins and minerals including iron.
- ✔ Hard cheeses are a good source of calcium for baby's developing bones and teeth. Aim for 2-3 portions of dairy food per day (1 portion = 30g of cheese). Avoid mould-ripened cheeses like camembert and blues like stilton.
- ✔ Lean red meat is the best source of iron and protein but fortified breakfast cereals, wholegrain bread, eggs and pulses all provide protein.
- ✔ Dried fruit including prunes, raisins and apricots contain essential nutrients including iron and calcium. Also, a source of fibre to help prevent constipation. 30g = 1 portion of the recommended 5-a-day.
- ✔ Nuts and seeds are healthy, energy-boosting snacks that include essential omega 3 fatty acids, vitamin E and iron.
- ✔ Wholegrain breakfast cereals (without sugar) are a good source of fibre. Fortified cereals contain folic acid and iron. Skimmed or semi-skimmed milk is a good source of iodine.
- ✔ Eggs are a source of protein, iron and vitamin D. They should be thoroughly cooked with yolks and whites solid – not runny.

## SUPPLEMENTS

- ✔ **10mg per day Vitamin D.**  
This regulates the amount of calcium and phosphate in the body to help keep bones, teeth and muscles healthy.
- ✔ **400mg per day Folic Acid.**  
Should be taken till the 12th week of pregnancy to help reduce the risk of neural tube defects in baby.

## MOTHER-TO-BE BODY CHANGES

Every woman is different, and their experience of pregnancy also differs but some physical and emotional experiences are common in each of the 3 trimesters of pregnancy.

### FIRST TRIMESTER

#### Week 1 till the end of week 13 of pregnancy

- ✓ Feelings of tiredness and possibly nausea.
- ✓ Weight gain of 1 or 2 kilos (may be less due to morning sickness).  
Extra weight is from placenta, breasts, uterus and extra blood.
- ✓ Heartbeat and breathing are faster.
- ✓ Breasts become larger, more tender and heavier.
- ✓ Need to urinate more often due to pressure on the bladder from growing uterus.
- ✓ Mood swings.

### SECOND TRIMESTER

#### Week 13 till the end of week 27 of pregnancy

- ✓ Week 13 till the end of week 27 of pregnancy
- ✓ Feeling better with less fatigue, morning sickness and moodiness.
- ✓ Mind wanders with lack of focus on tasks at home and work.
- ✓ Weight gain is about 6 kilos.
- ✓ Anxiety about tests like ultrasound to check progress is normal.
- ✓ Hair may become thicker and fingernails stronger.  
Conversely, nails may become softer and break more easily.
- ✓ Cravings may develop for foods that are sweet, spicy or fatty.
- ✓ An exaggerated dislike may develop for the taste or smell of some foods.

### THIRD TRIMESTER

#### Week 28 till the end of pregnancy (usually week 40)

- ✓ Forgetfulness may continue.
- ✓ Feelings of tiredness and discomfort may continue.
- ✓ Worry about labour as it approaches.
- ✓ Weight gain of about 5 kilos due to baby, amniotic fluid, placenta, breasts, uterus and blood.
- ✓ Possible back pain.
- ✓ Difficulty sleeping due to discomfort.
- ✓ Baby may put pressure on lungs, making breathing more difficult.
- ✓ Braxton Hicks contractions (tightening of the muscles of the uterus) may occur but does not mean labour is starting.

## BABY DEVELOPMENT

WEEK	DEVELOPMENT
<b>1 &amp; 2</b>	Sperm fertilises egg to produce a zygote.
<b>3</b>	Baby is made up of several hundred cells multiplying rapidly.
<b>4</b>	Baby is an embryo, and placenta is developing.
<b>5</b>	Embryo is growing rapidly.
<b>6</b>	Baby's heart has started beating.
<b>7</b>	Eyes, nose, mouth and ears are taking shape.
<b>8</b>	Hands and feet are sprouting webbed fingers and toes.
<b>9</b>	Baby starts to look more like a human.
<b>10</b>	Baby has finished the most critical part of development.
<b>11</b>	Baby is kicking and stretching (not detectable by mother).
<b>12</b>	Baby is 3" long and has fingerprints.
<b>13</b>	Baby can curl its toes and make sucking movements.
<b>14</b>	Baby is able to make facial expressions.
<b>15</b>	Baby can move its joints and is forming taste buds.
<b>16</b>	Baby begins a growth spurt.
<b>17</b>	Baby skeleton is changing from soft cartilage to bone.
<b>18</b>	Genitals are developed enough to see on ultrasound.
<b>19</b>	Hair is sprouting on baby's scalp.
<b>20</b>	Baby's taste buds are now working.
<b>21</b>	Possible to feel baby kicking.
<b>22</b>	Baby may be able to hear mother's heartbeat.
<b>23</b>	Baby's sense of movement is well developed.
<b>24</b>	Baby remains long and lean.

WEEK	DEVELOPMENT
<b>25</b>	Baby adds fat and grows more hair.
<b>26</b>	Baby is inhaling/exhaling amniotic fluid – practice for breathing.
<b>27</b>	Eyes can open, and baby may be sucking fingers.
<b>28</b>	Baby's eyes may be capable of detecting light.
<b>29</b>	Muscles and lungs are maturing.
<b>30</b>	Baby now weighs about 3lbs.
<b>31</b>	Baby's kicks can be felt more often.
<b>32</b>	Baby is growing rapidly.
<b>33</b>	Baby now weighs more than 4lbs.
<b>34</b>	Central nervous system and lungs mature further.
<b>35</b>	Baby now has less room to move.
<b>36</b>	Baby is gaining an ounce a day.
<b>37</b>	Brain and lungs continue to mature.
<b>38</b>	Baby's hands are able to grasp
<b>39</b>	Baby is full term.
<b>40</b>	Delivery is due.
TERM	DEFINITIONS
<b>Pre-Term</b>	Before 37 weeks.
<b>Early</b>	Between 37 weeks and 38 weeks 6 days.
<b>Full</b>	Between 39 weeks and 40 weeks 6 days.
<b>Late</b>	The 41st week.
<b>Post</b>	After 42 weeks.

## THE ISILAC RANGE

### Optimal growth, Development & Protection.

Research has shown that there are differences in the way the constituents in infant formulas are absorbed, which may have a bearing on growth and development. Isilac milks are advanced formulas that have been developed to mimic breastmilk as closely as possible and to meet the needs of infants from birth onwards.

#### Products in the Isilac range benefit from:

- ✓ The highest standards of manufacturing procedures and quality (GMP, HACCP).
- ✓ Optimal digestion and metabolism.
- ✓ Optimal GI tolerability.
- ✓ Optimal growth and healthy weight gain.
- ✓ Optimal psychomotor, visual and mental development.
- ✓ Optimal bone mineralisation and strength of bone.
- ✓ Protection from micronutrient deficiency e.g. IDD, IDA, etc.
- ✓ Optimal immune response and protection with key ingredients HMO and GOS & Nucleotides.

400g



**ISILAC 1**

Infant formula for babies 0-6 months providing high protein for optimal growth.

400g



**ISILAC 2**

Follow-on formula for babies 6-12 months, designed to encourage the growth of beneficial bacteria while meeting the needs of a growing baby for increased calories, calcium, iron and protein.

400g



**ISILAC 3**

Growing-up milk for infants from 1 year, providing balanced calories and nutrients.

70ml



**ISILAC RTF**

Starter formula for babies 0-6 months is also available as a ready-to-feed preparation.

